

FIG. 1A

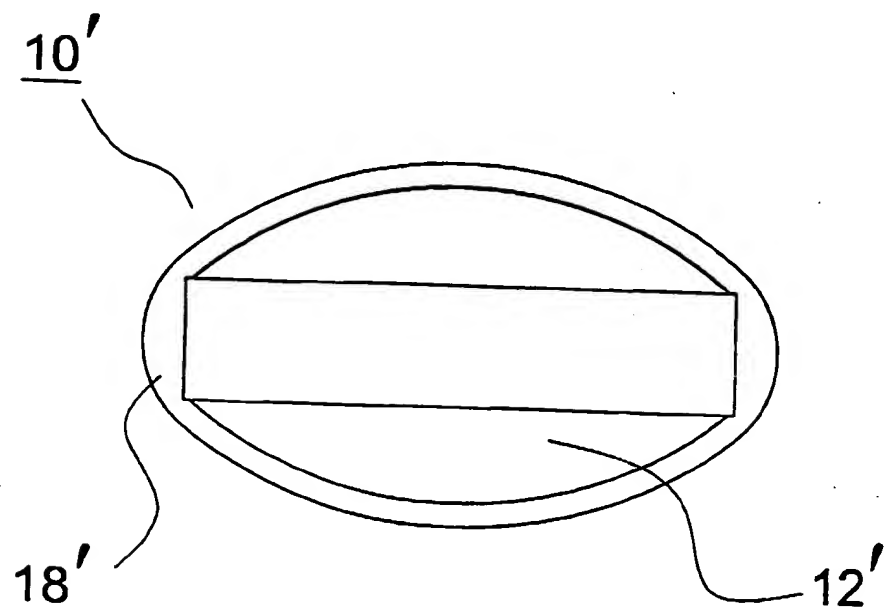


FIG. 1B

FO8260" 26495660

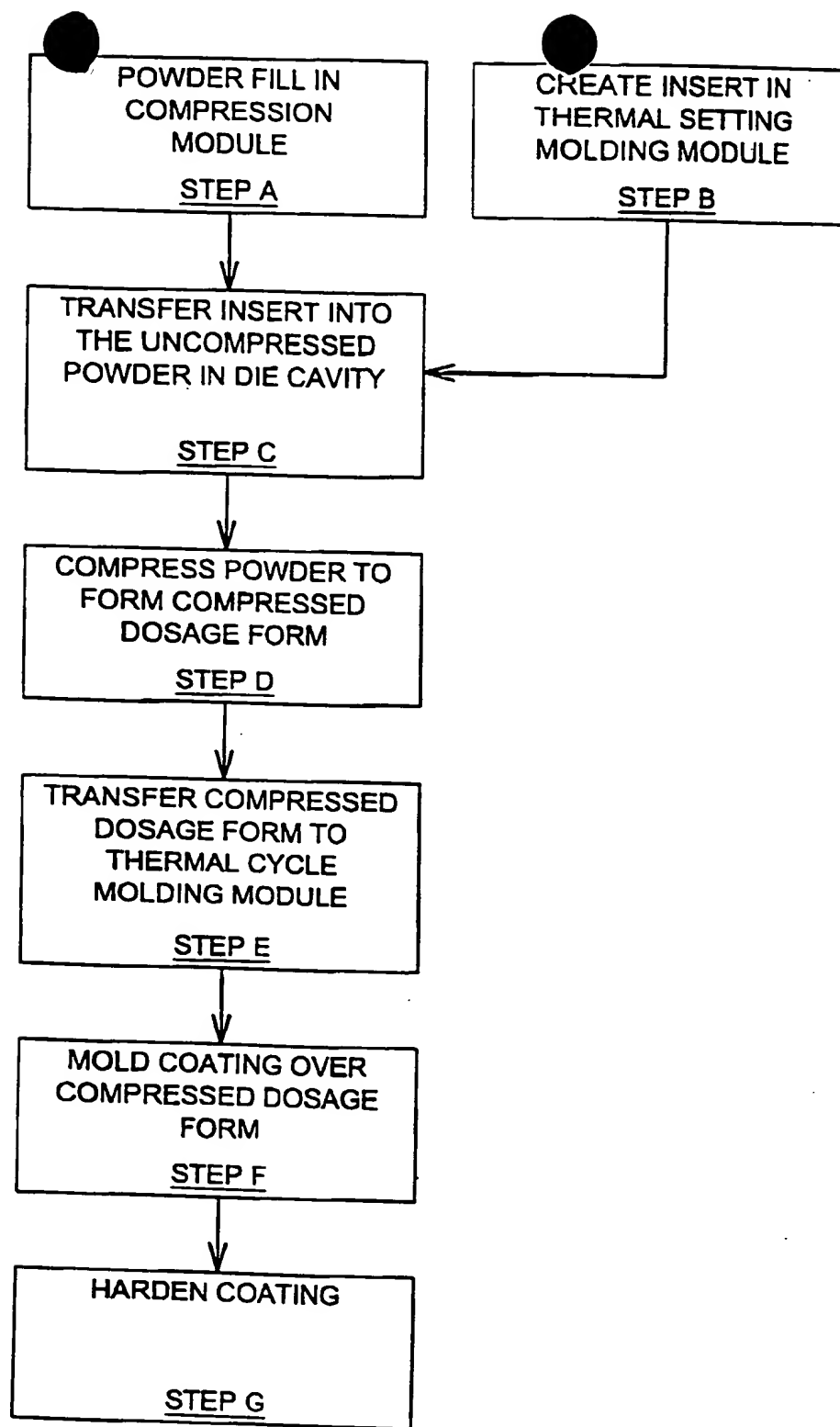


FIG. 2

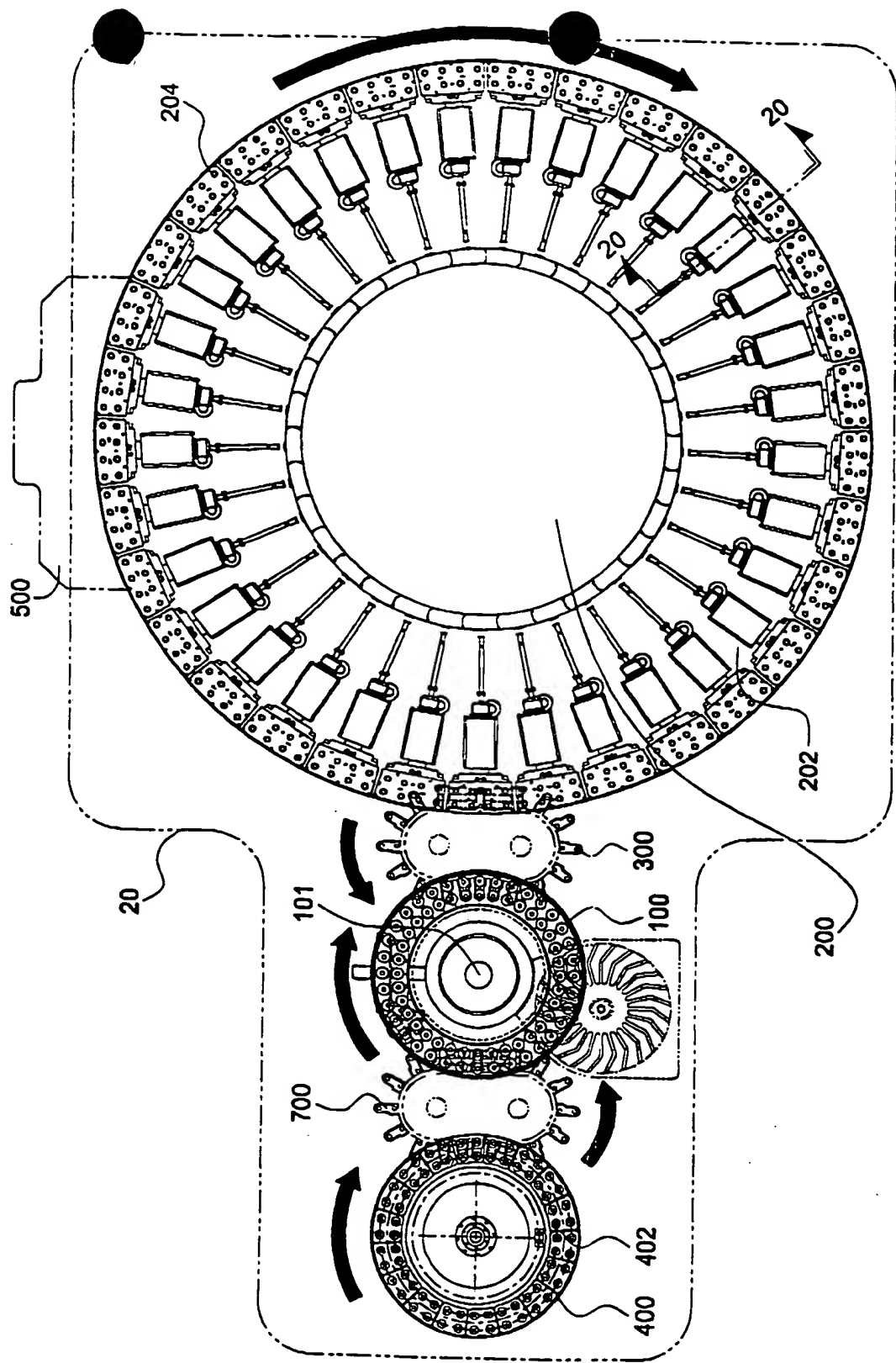


FIG. 3

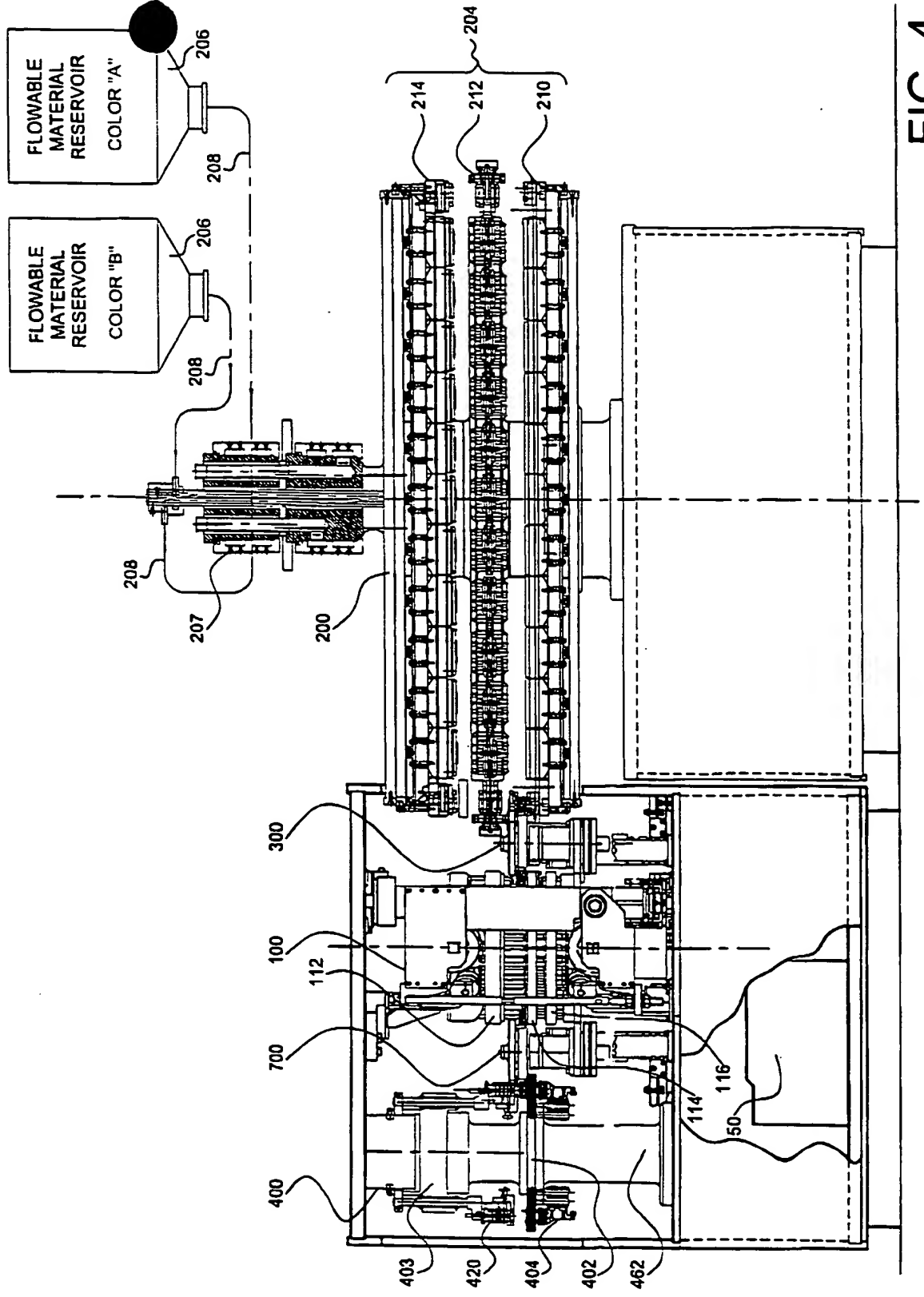
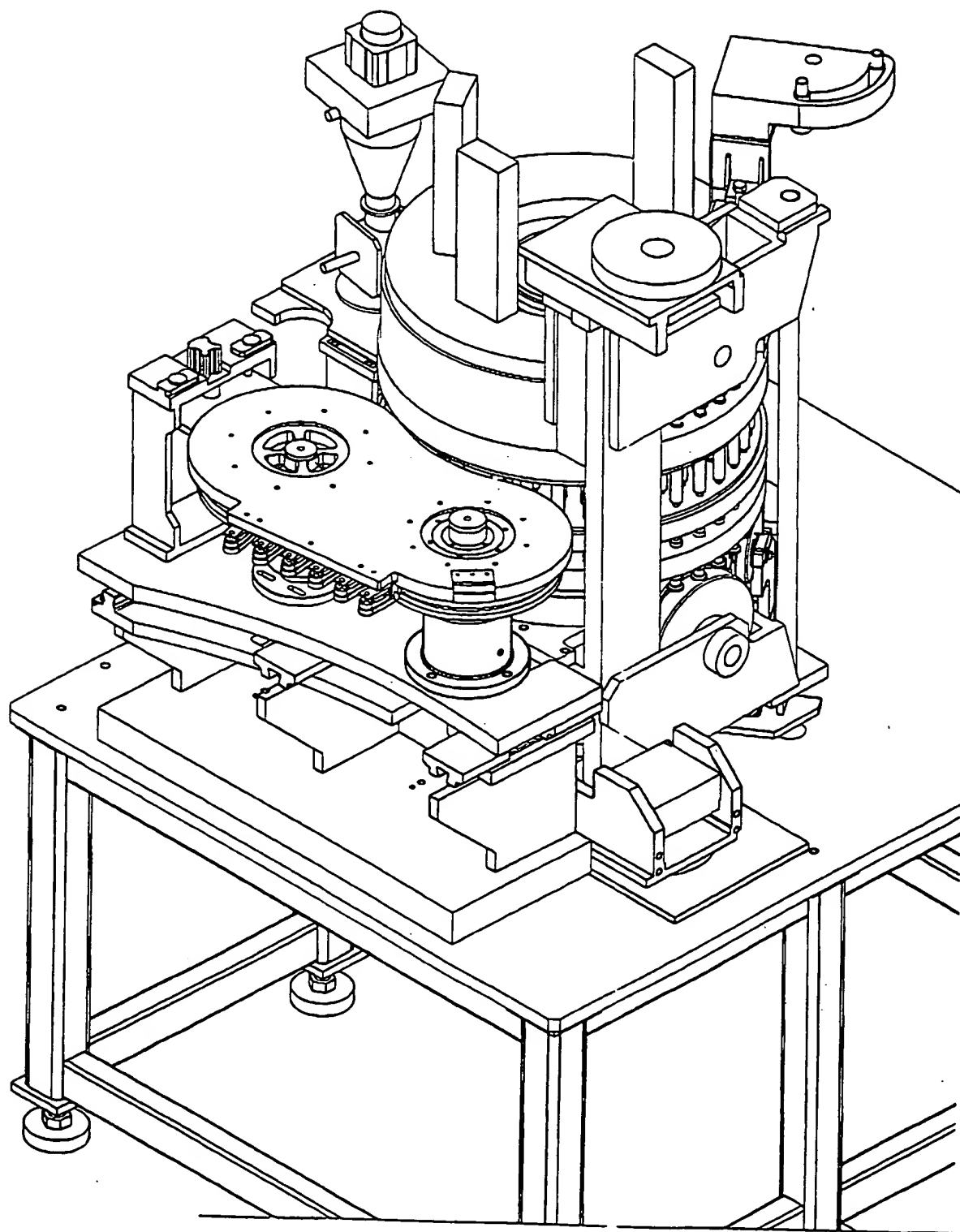


FIG. 4

FIG. 5



108250-2649660

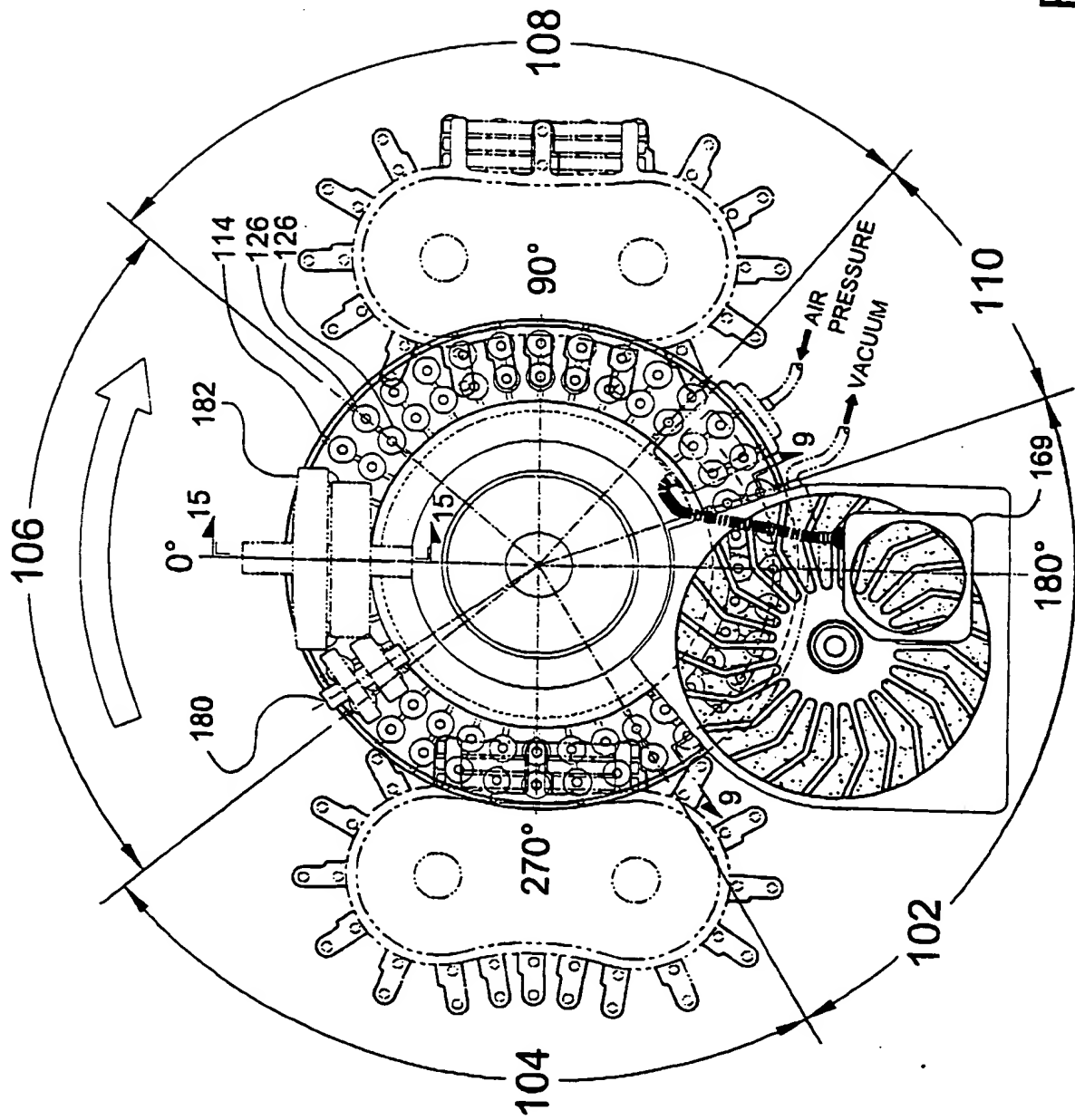


FIG. 6

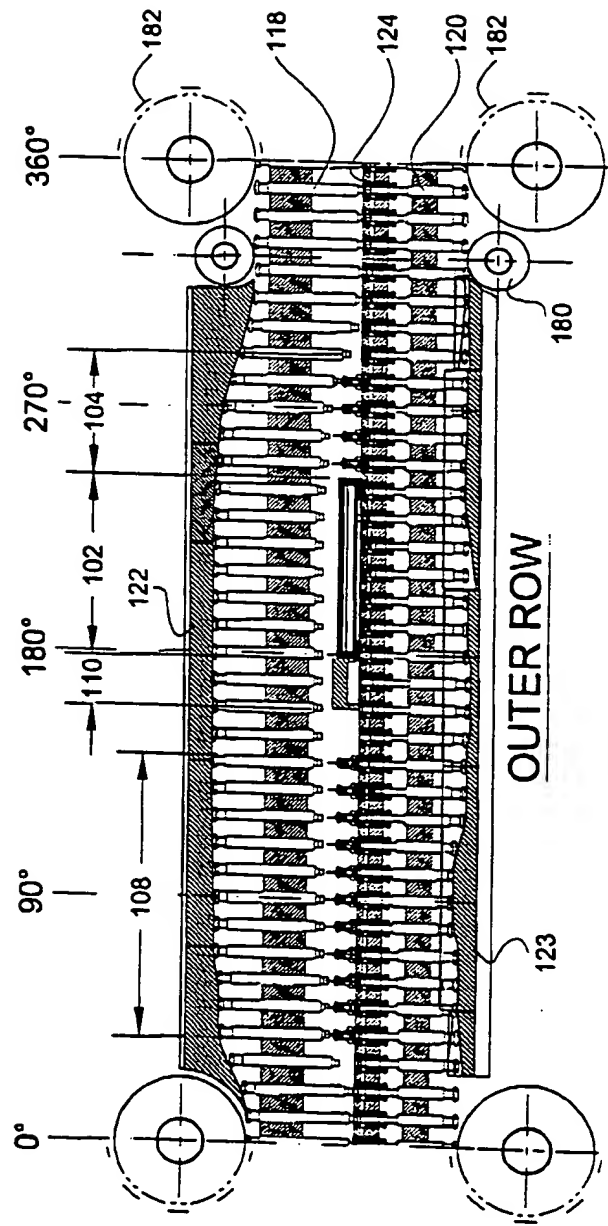


FIG. 7

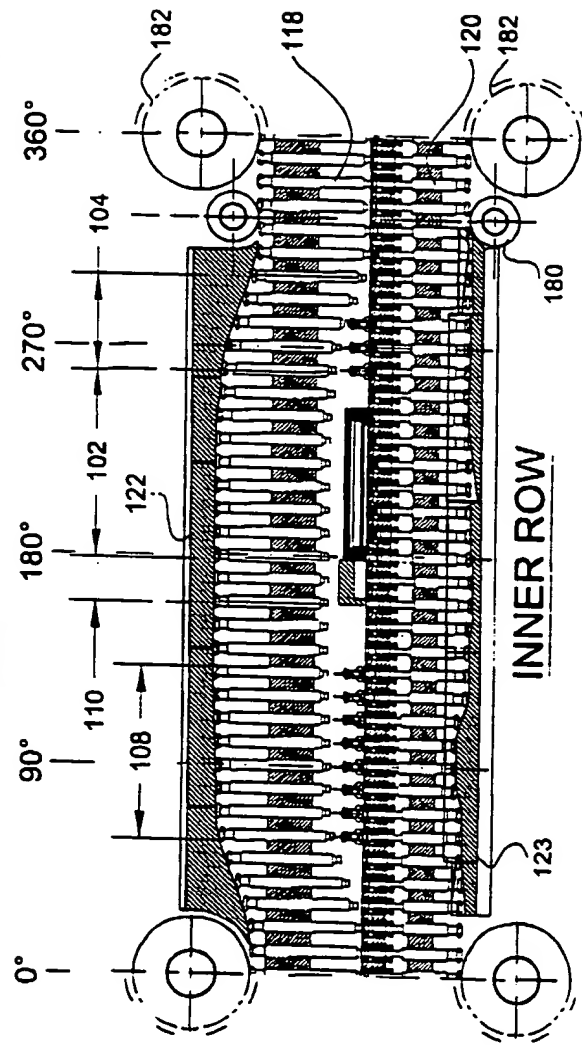


FIG. 8

FIG. 9

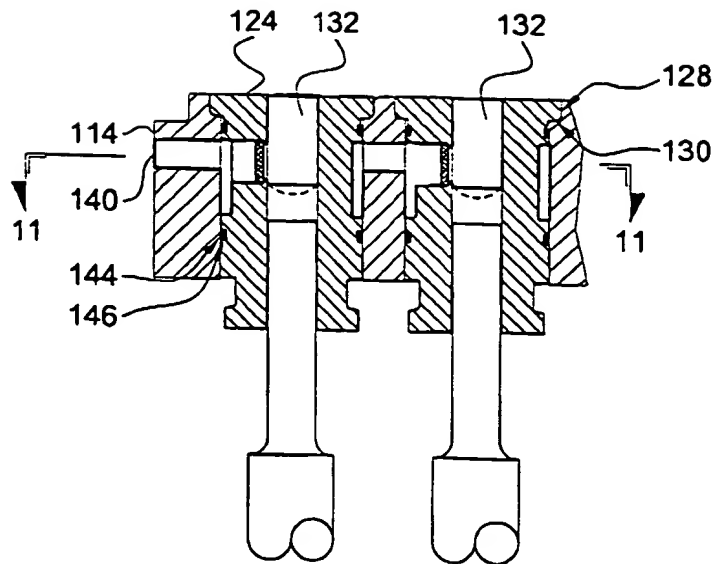


FIG. 10

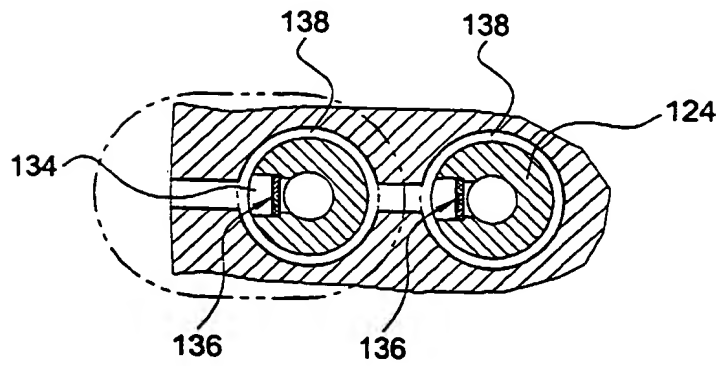


FIG. 11

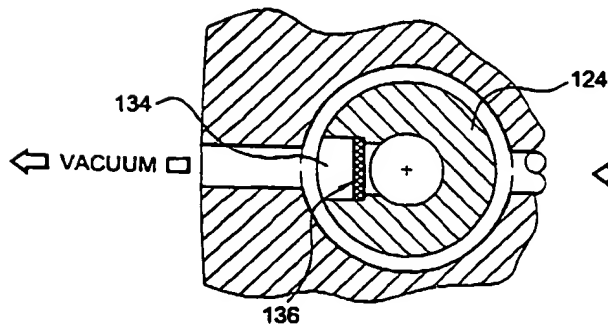


FIG. 12

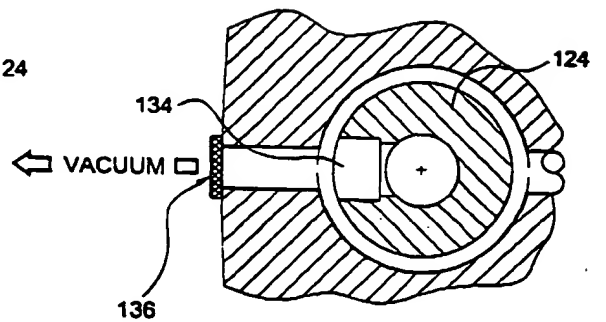


FIG. 12A

109965497.092801

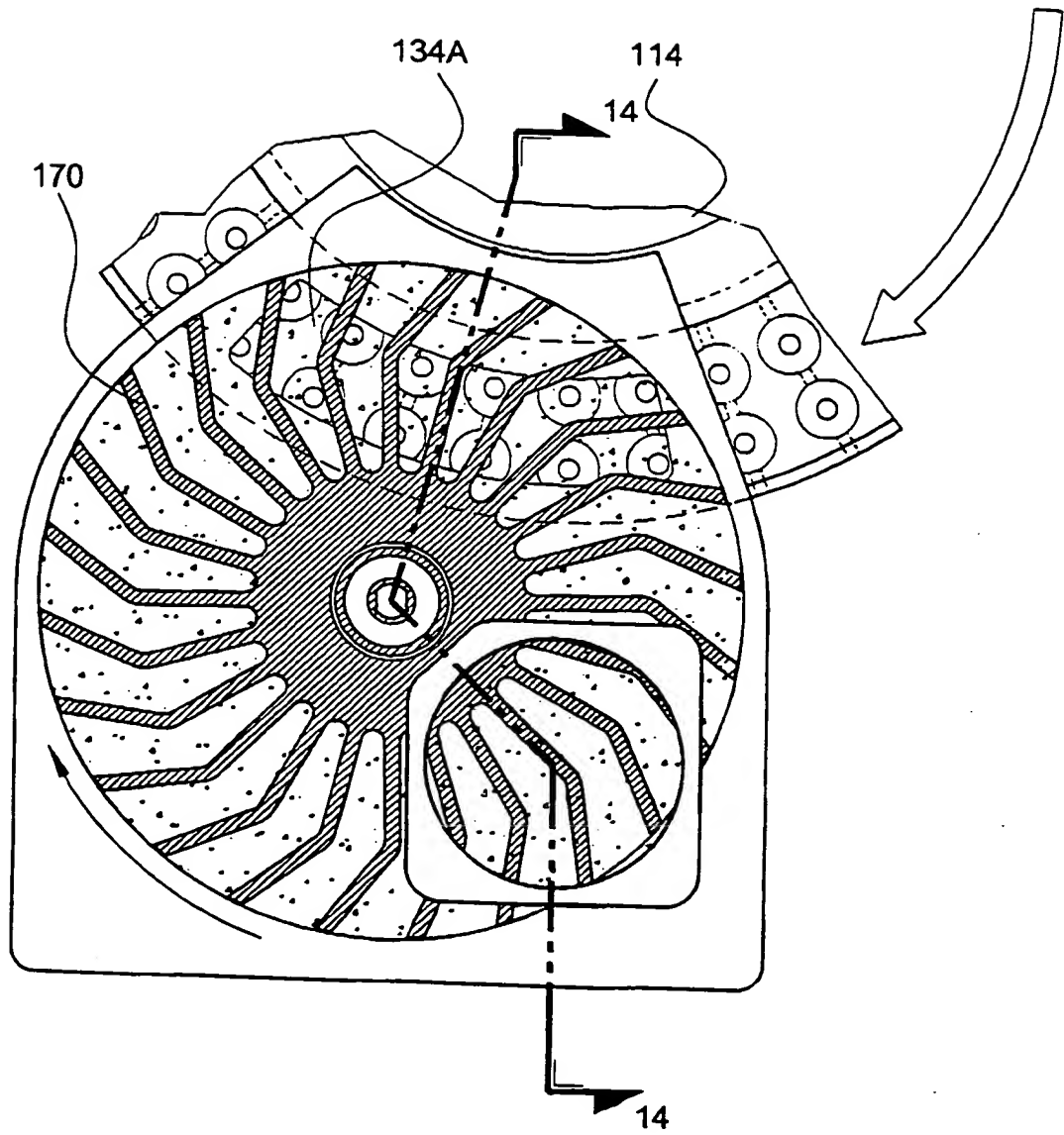


FIG. 13

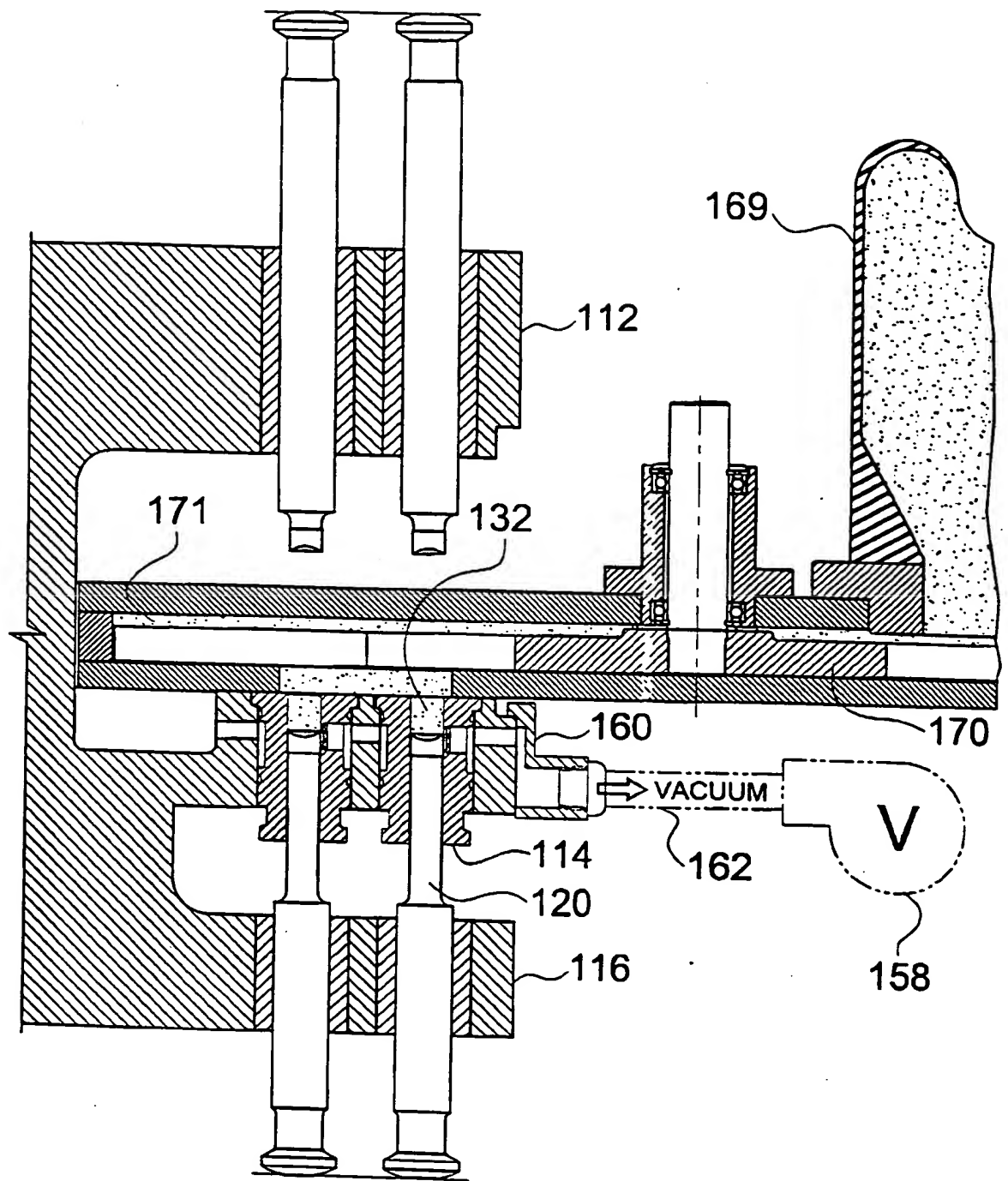


FIG. 14

FIG. 15

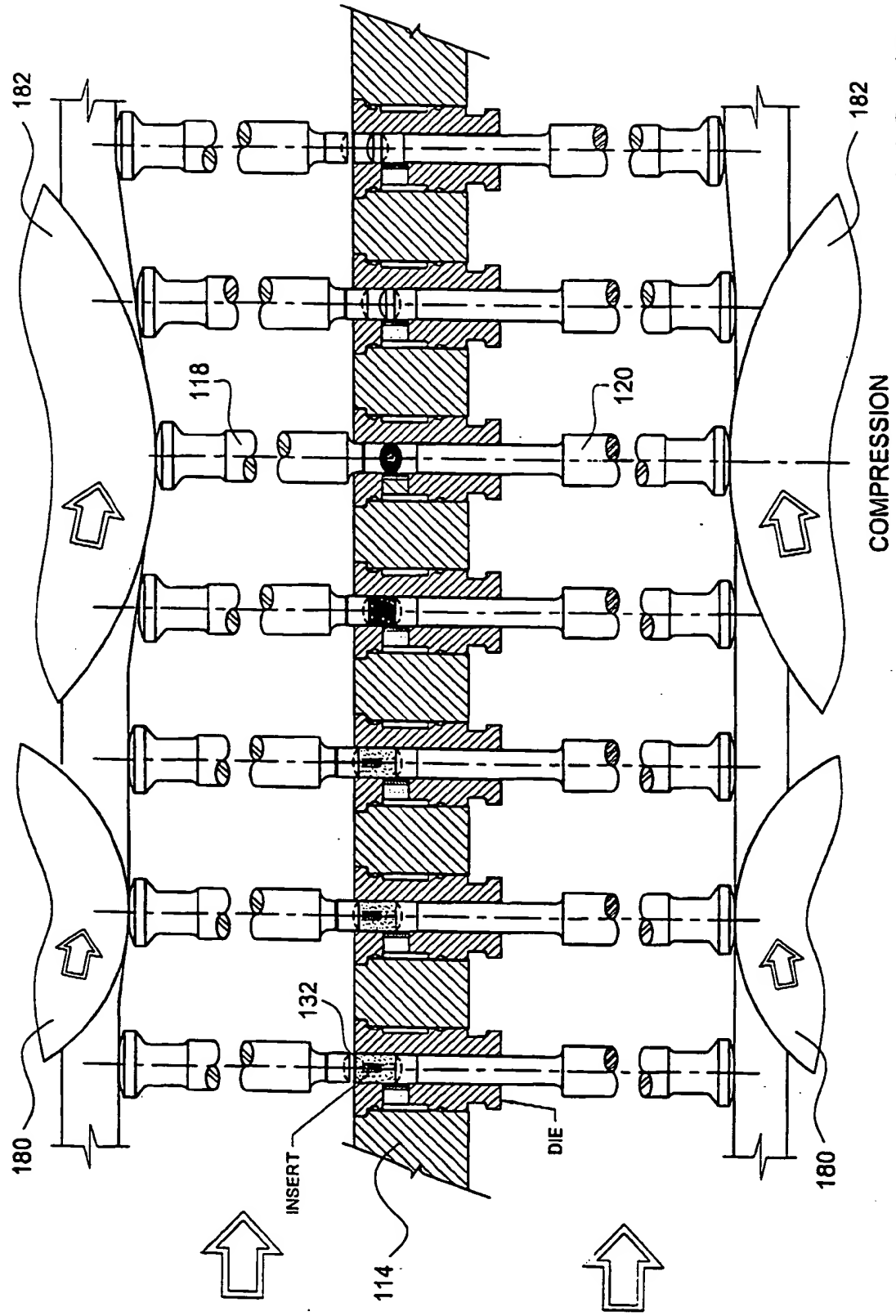
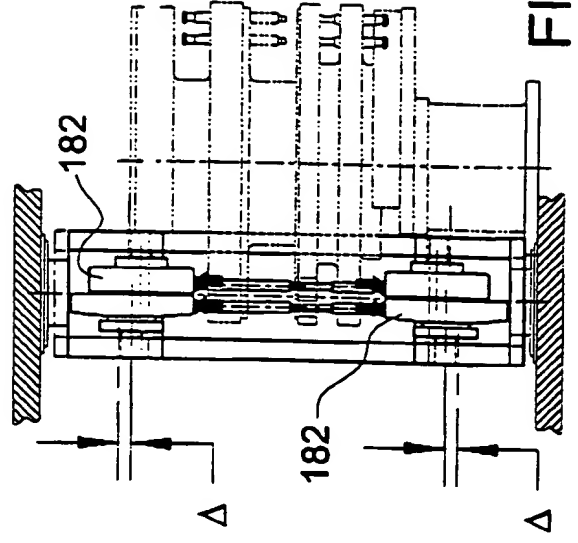
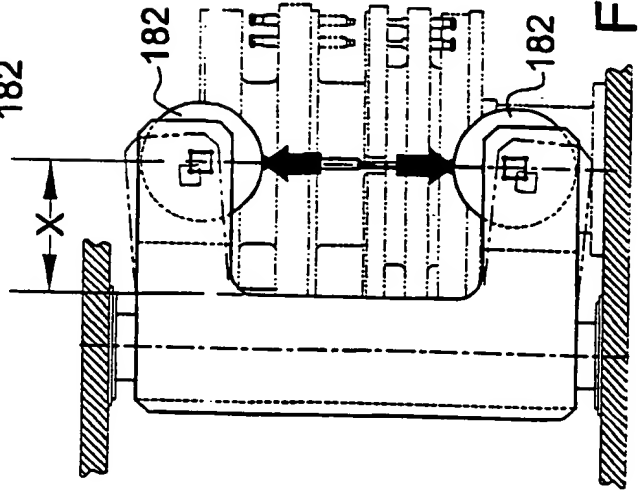
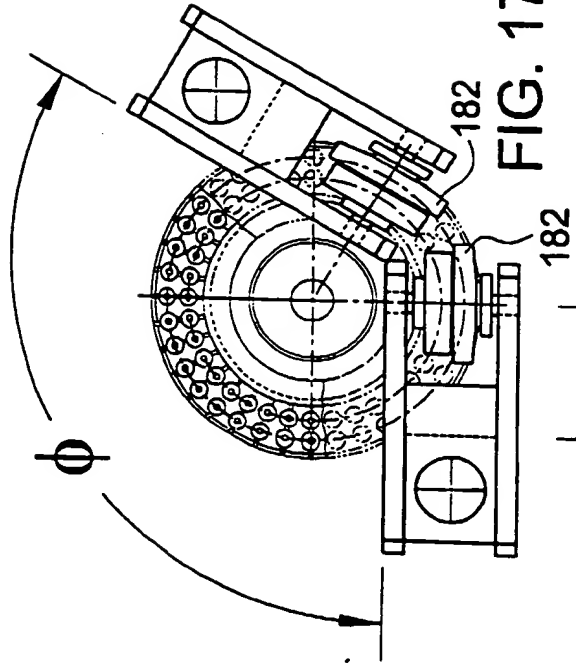


FIG. 16



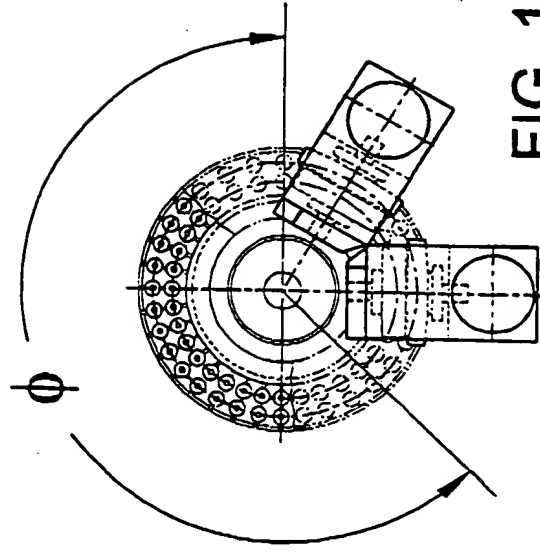


FIG. 18A

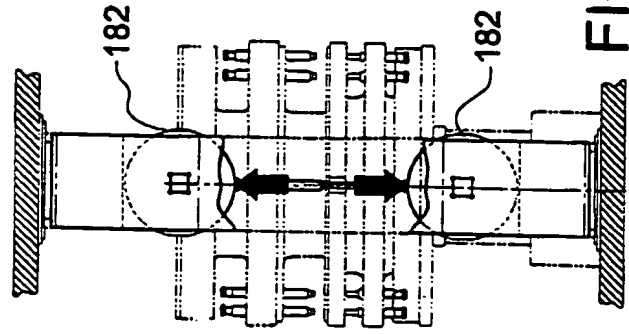


FIG. 18B

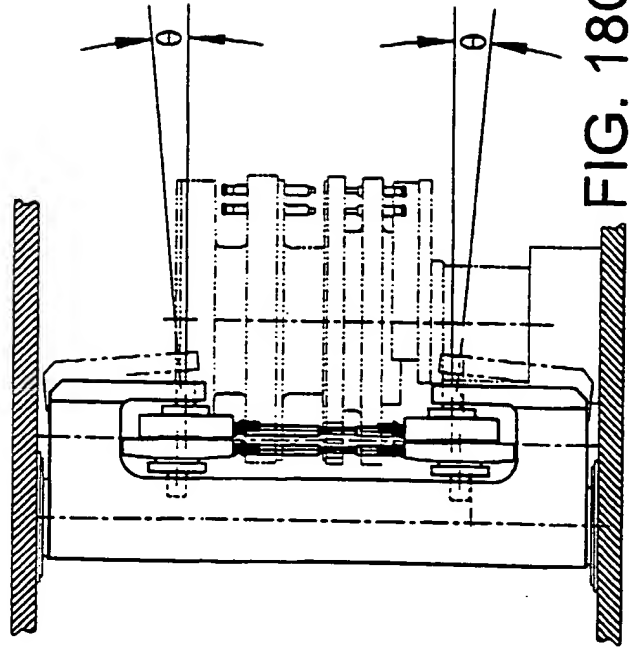


FIG. 18C

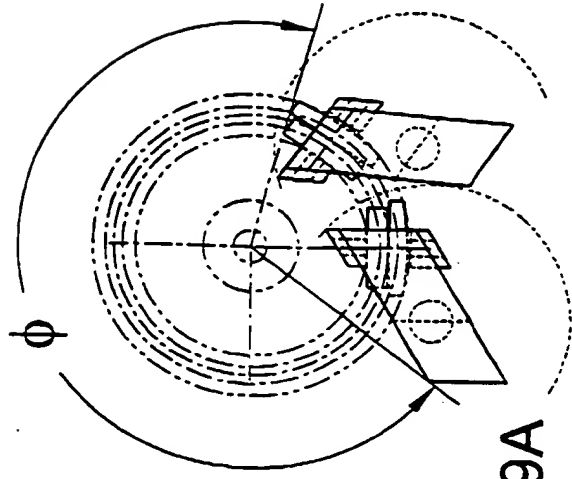


FIG. 19A

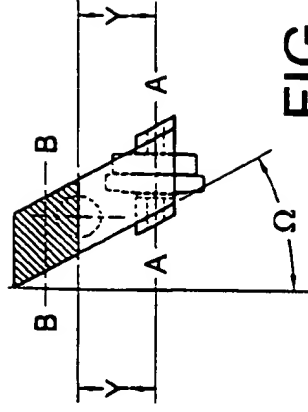


FIG. 19D

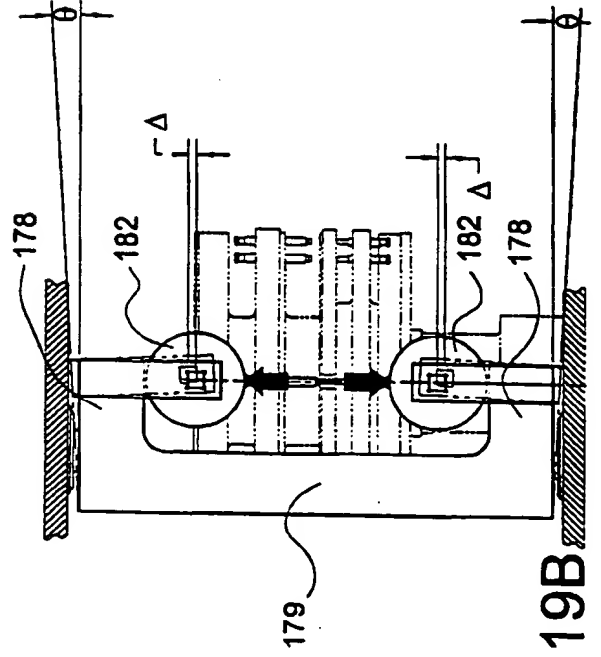


FIG. 19B

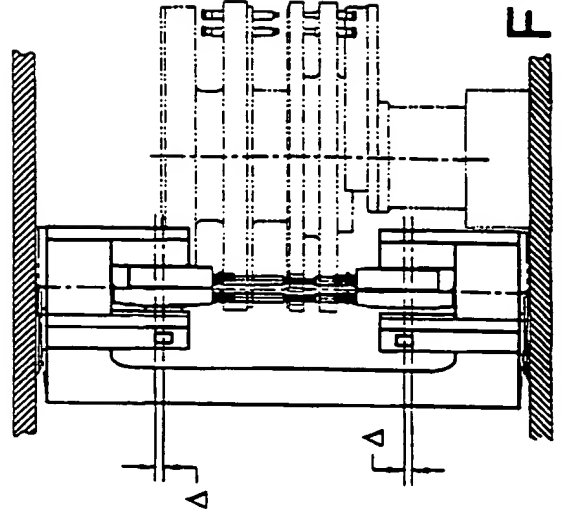
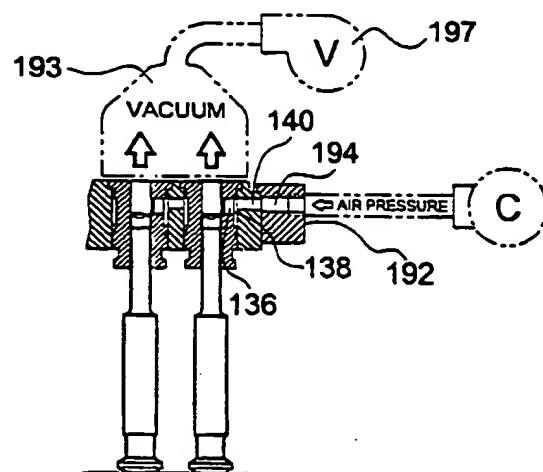
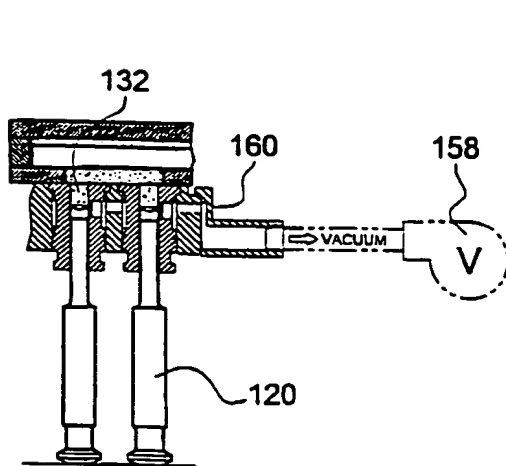
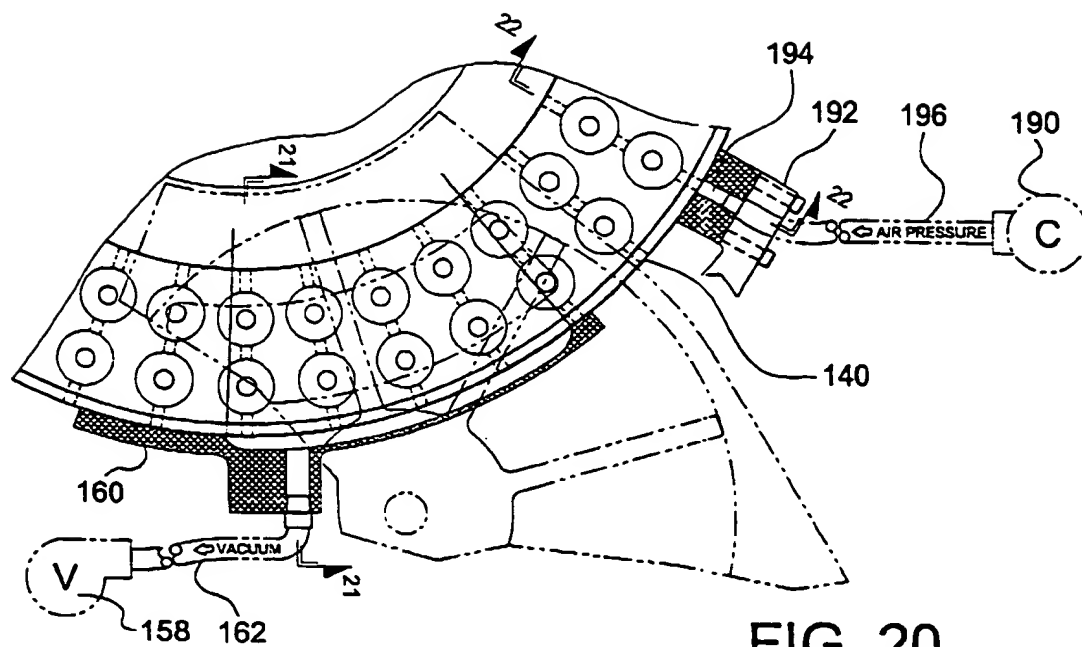


FIG. 19C



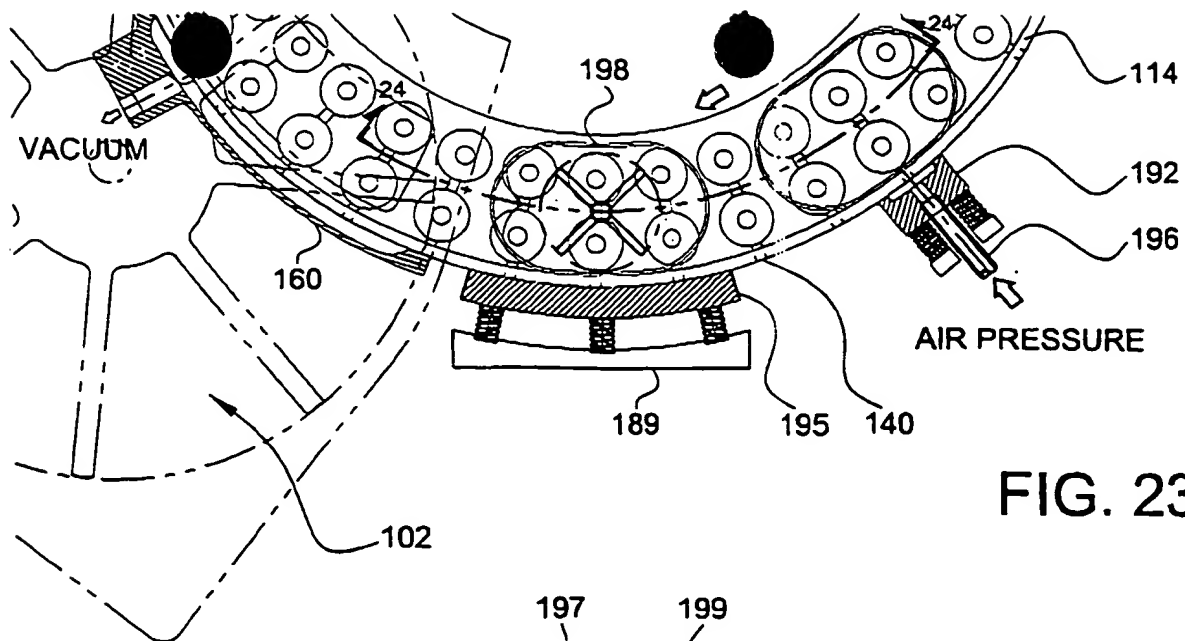


FIG. 23

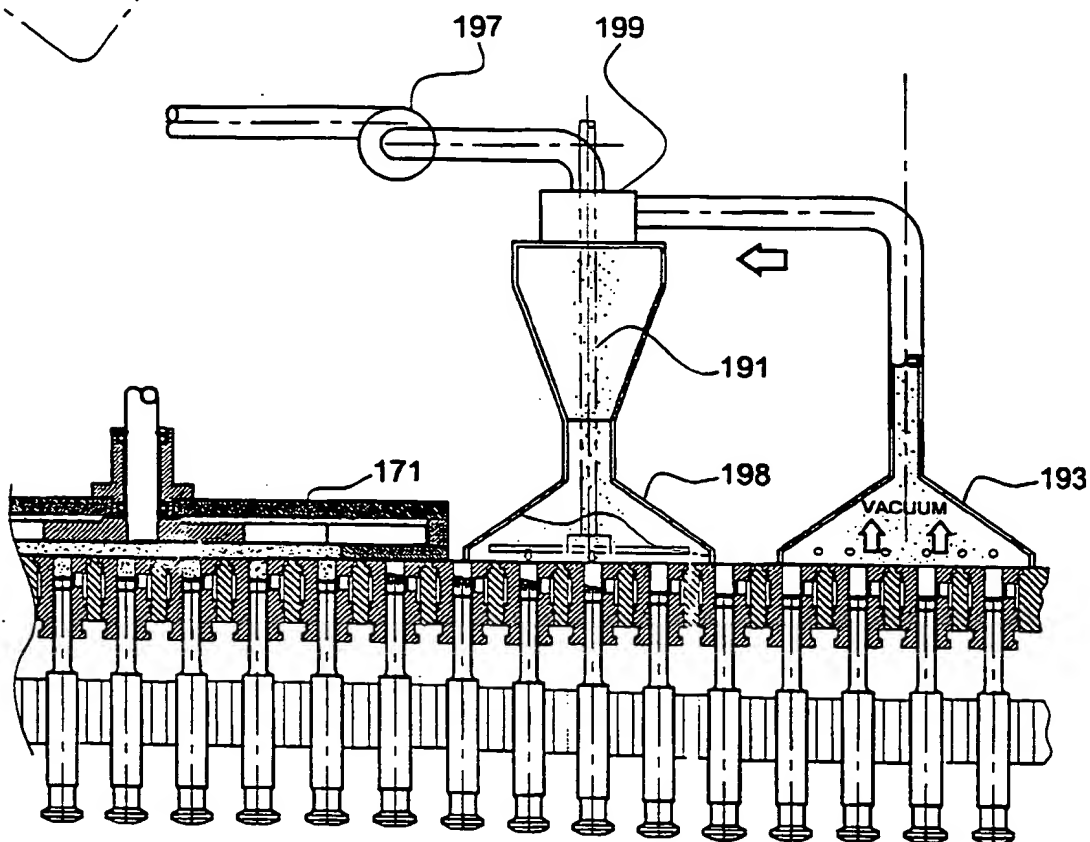


FIG. 24

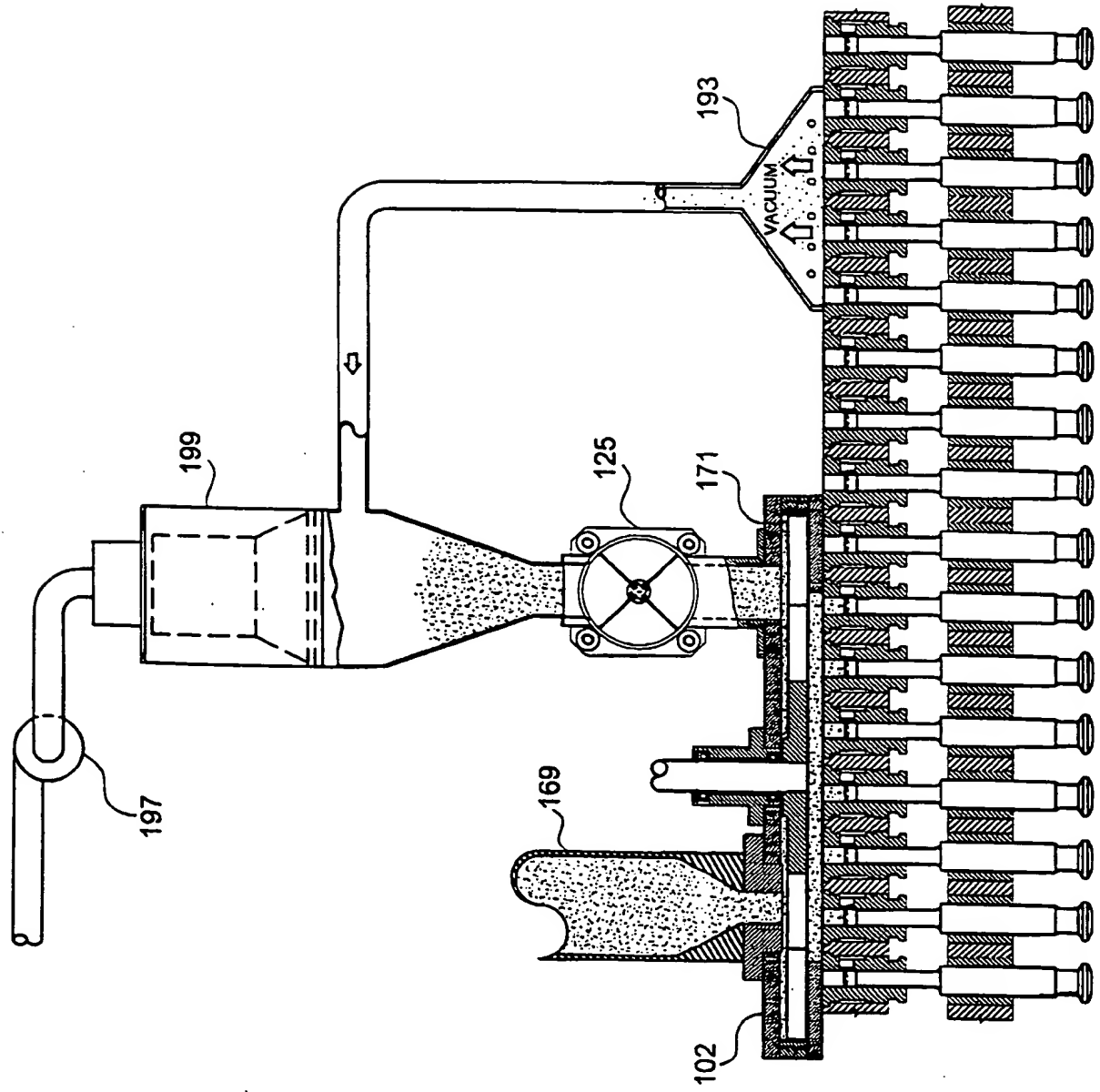


FIG. 25

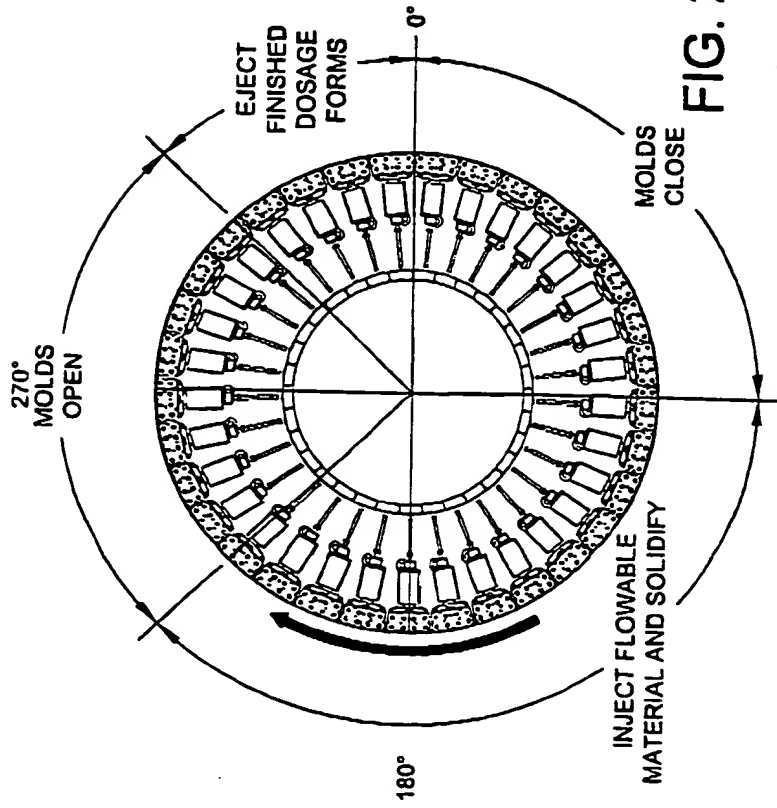


FIG. 26A

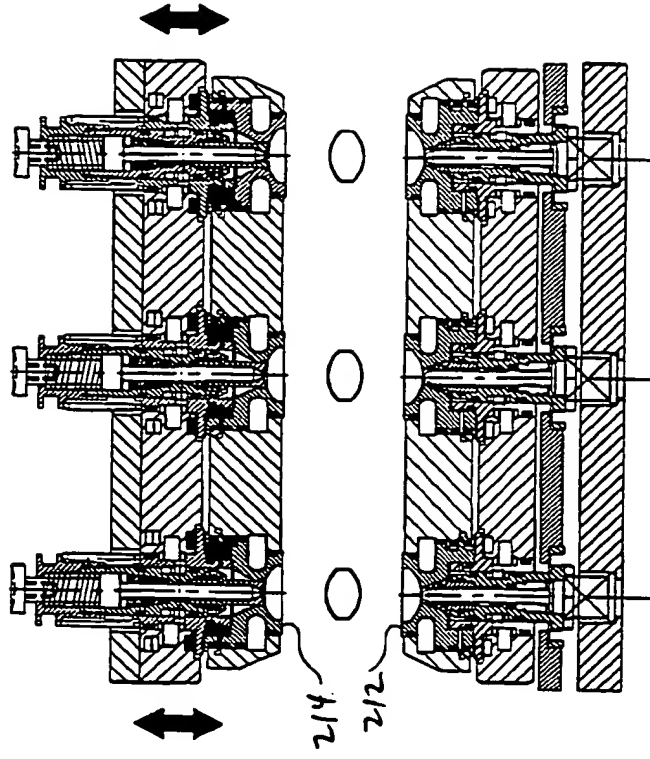


FIG. 26C

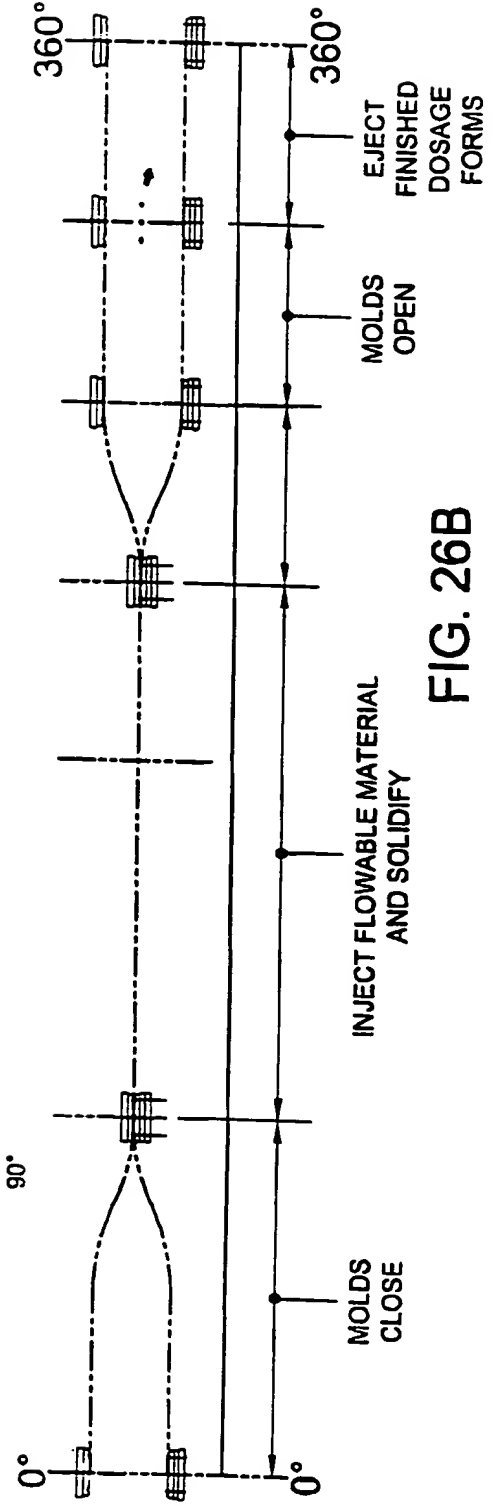
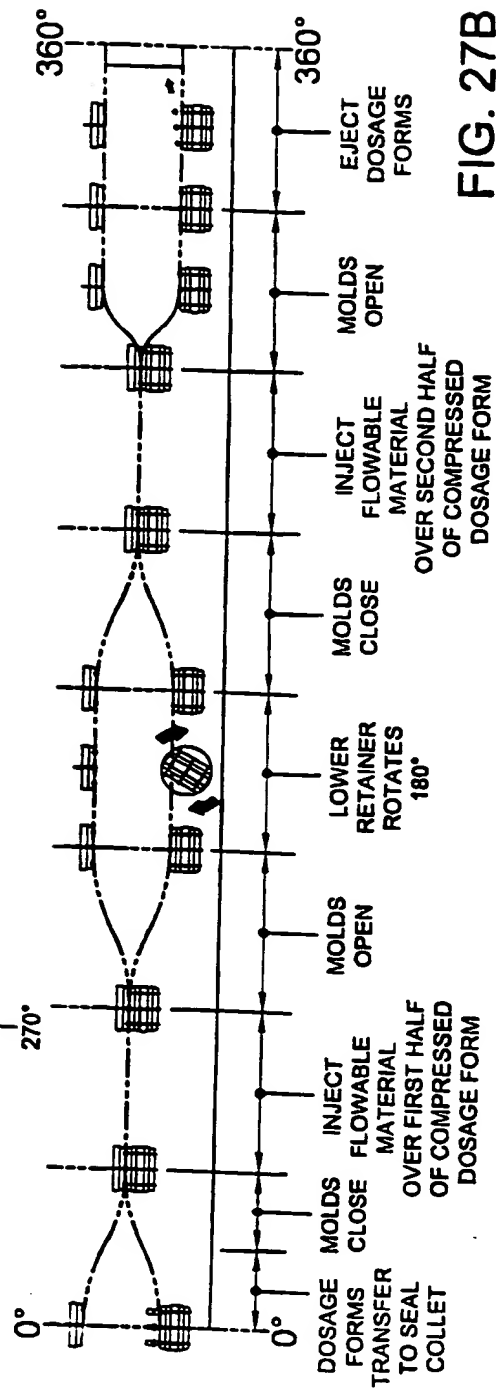
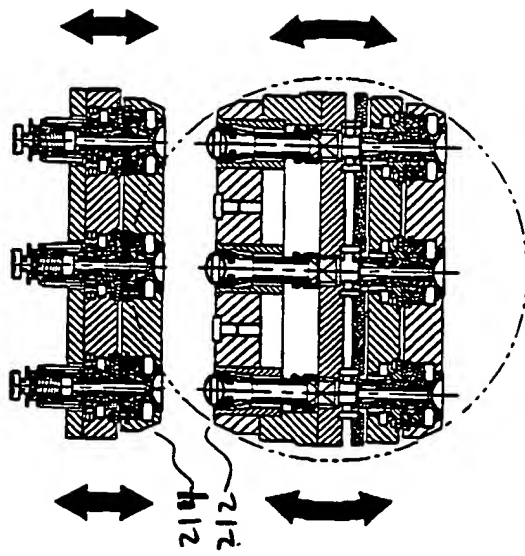
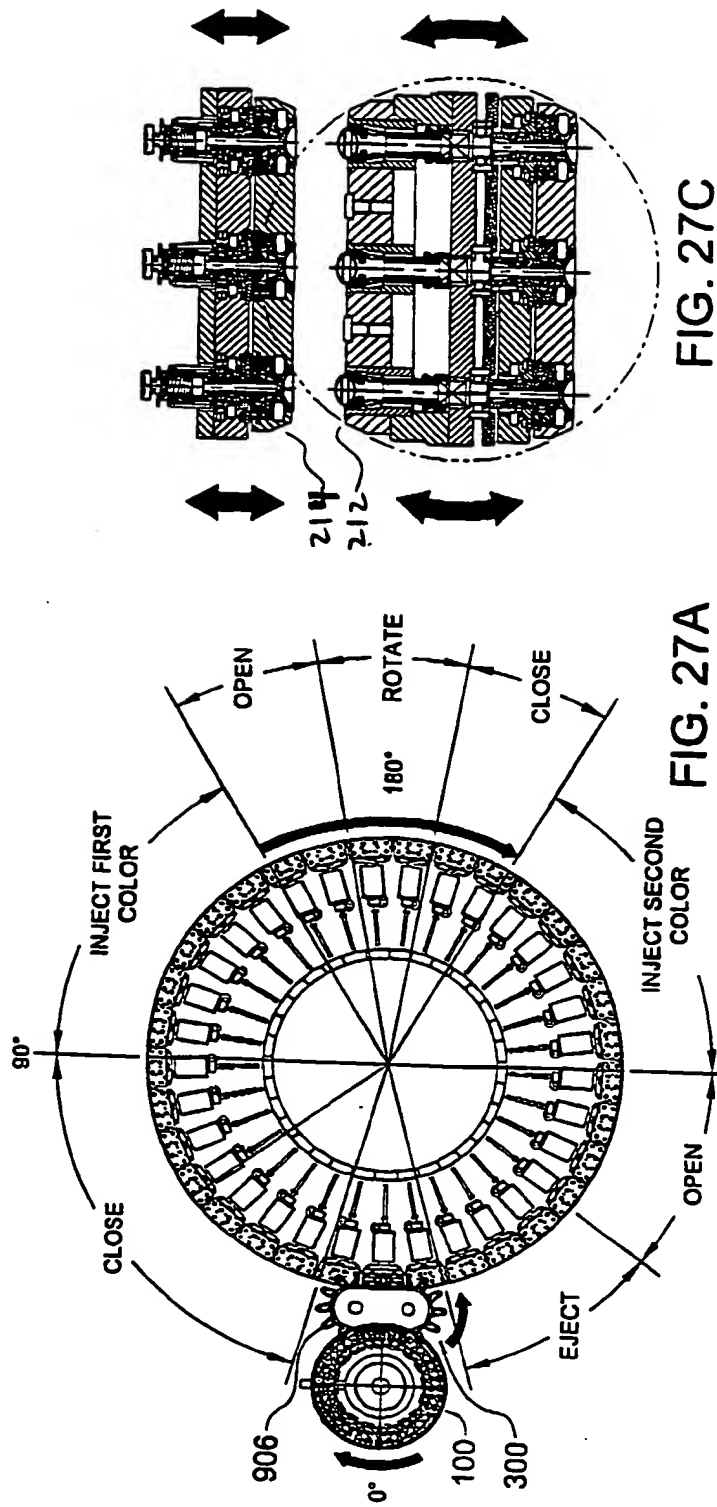


FIG. 26B



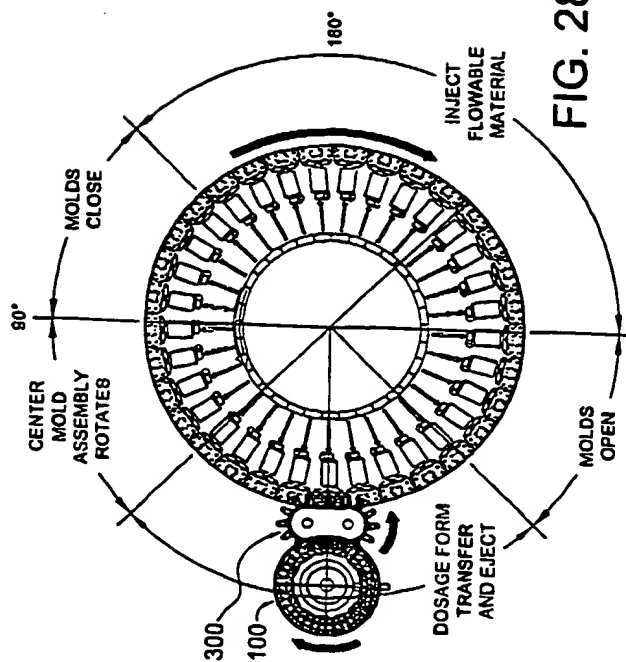


FIG. 28A

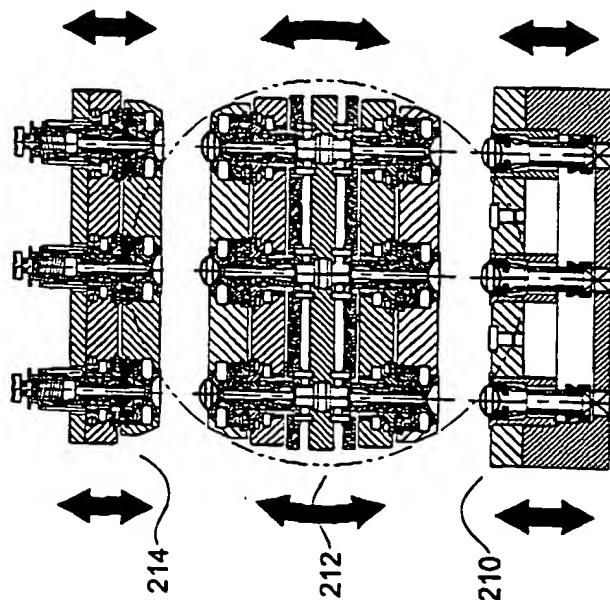


FIG. 28B (SECOND REVOLUTION) 0°/720°

(FIRST REVOLUTION) 360°

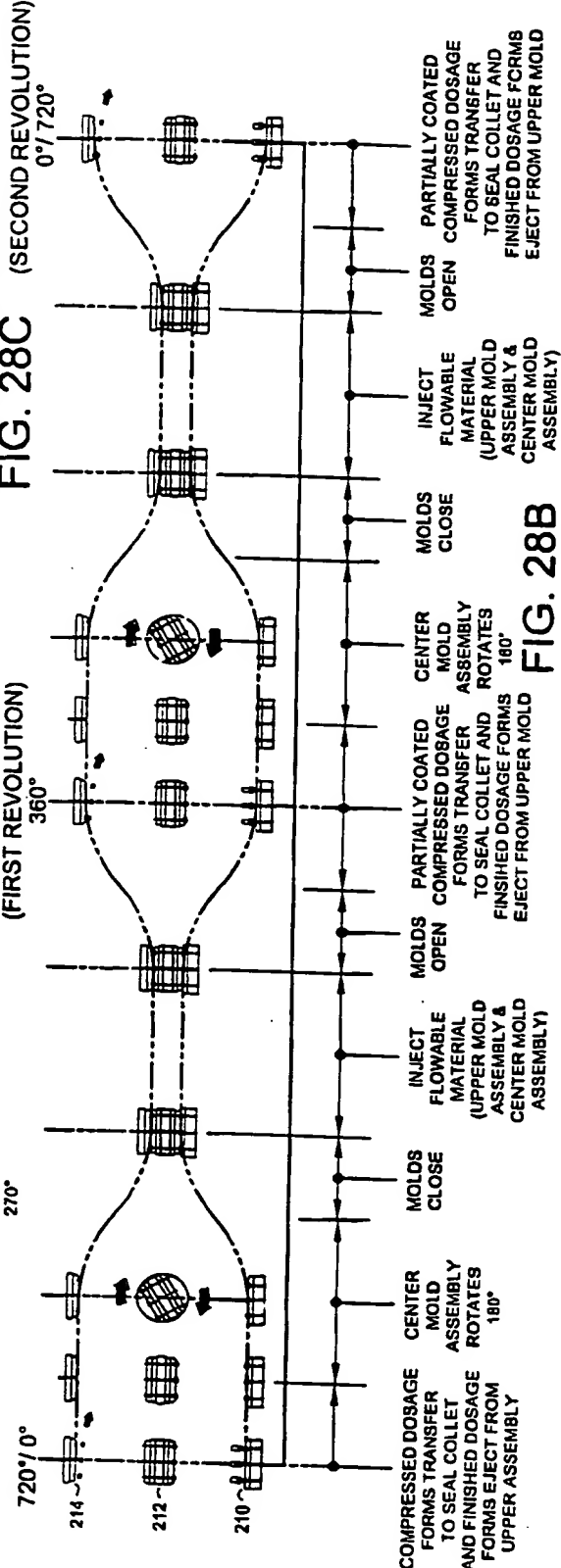


FIG. 28C

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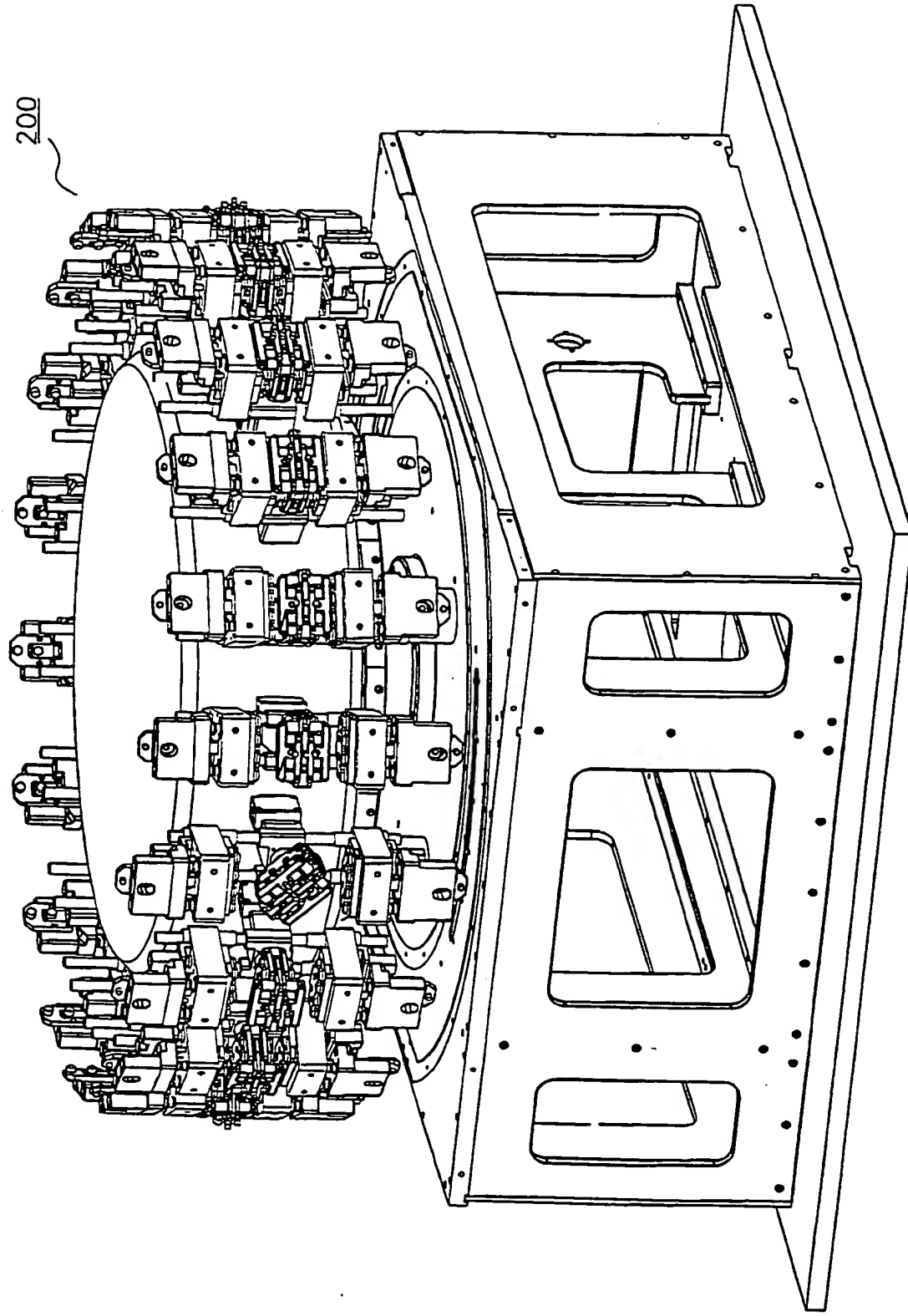


FIG. 29

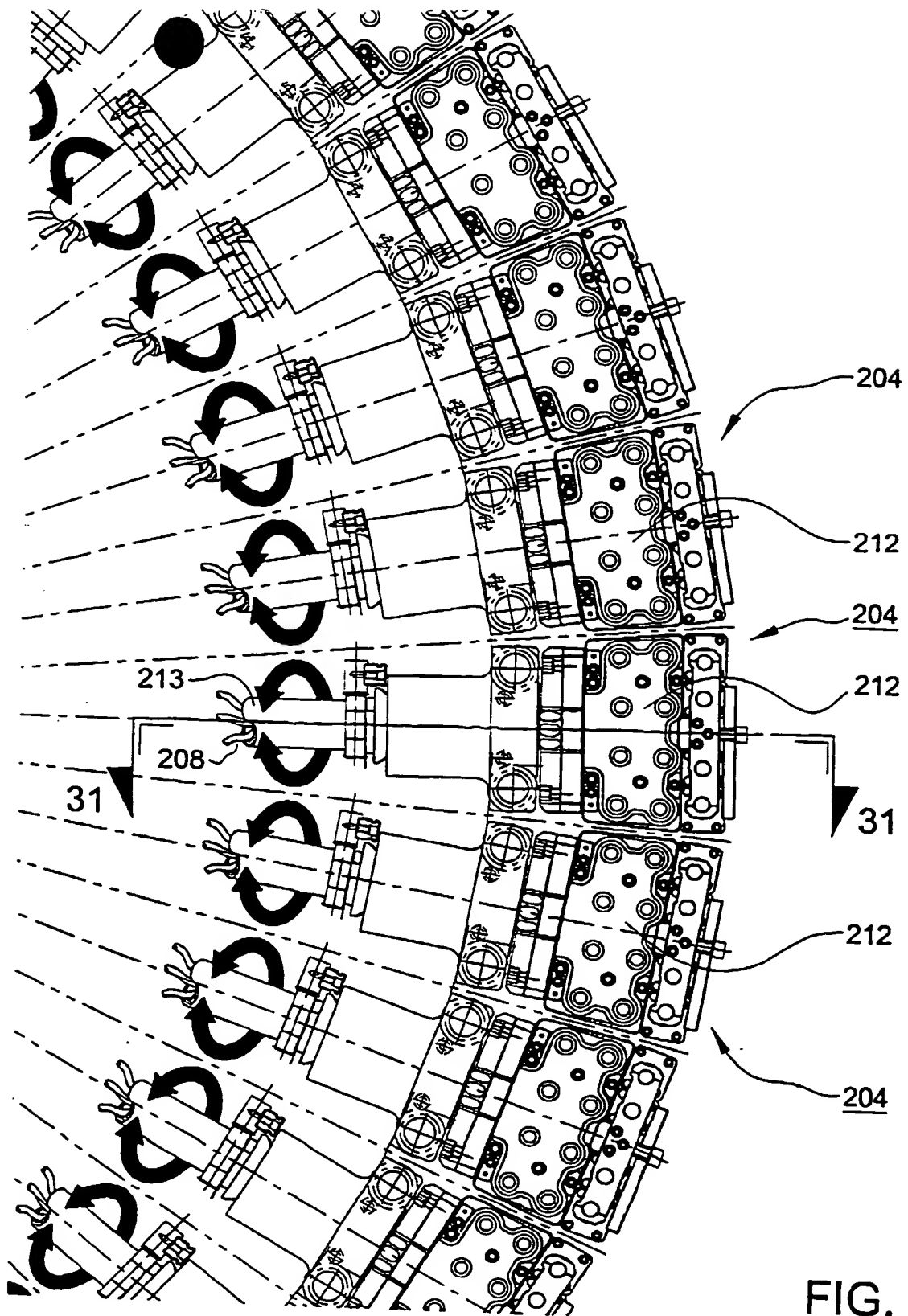


FIG. 30

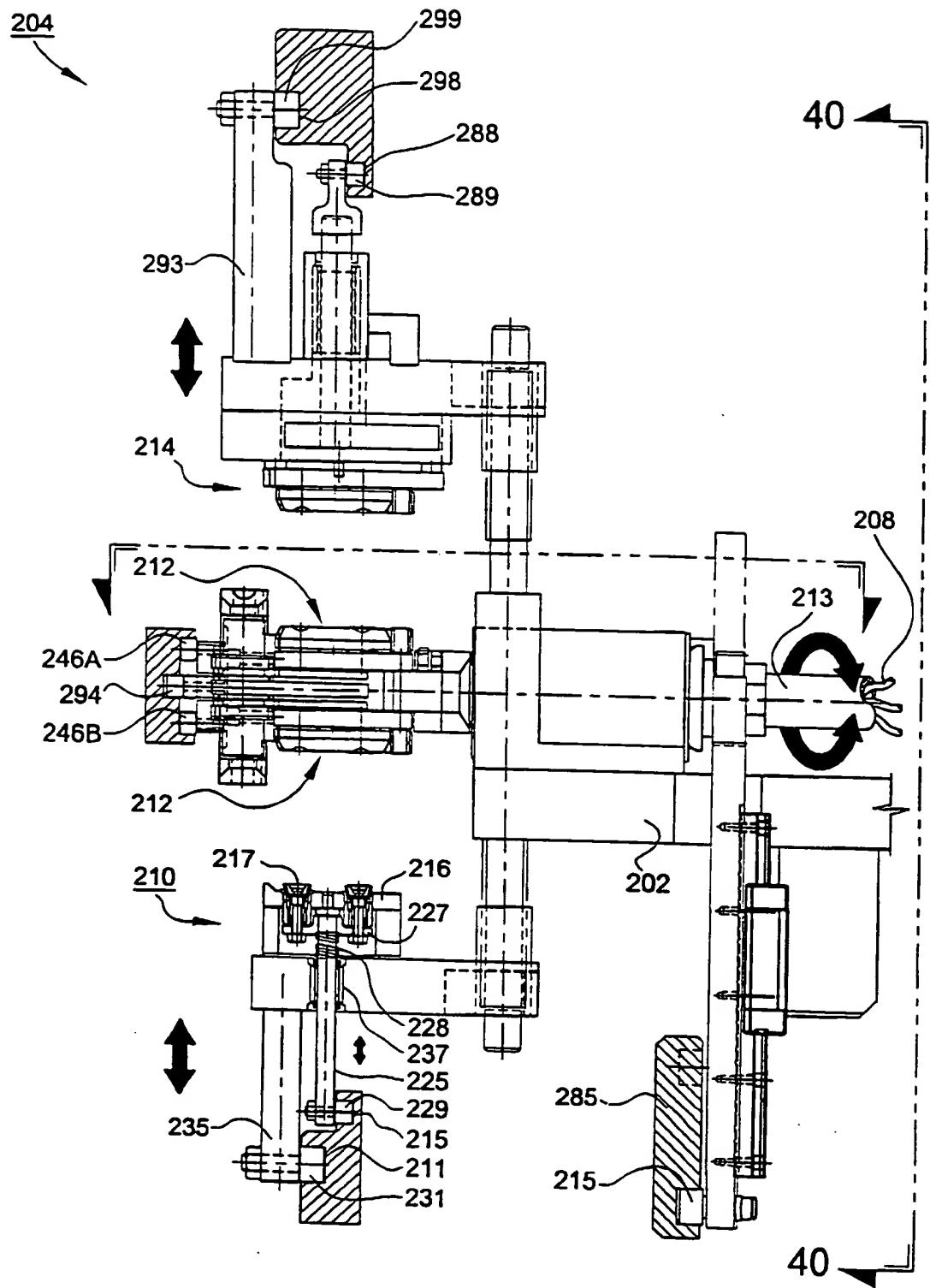


FIG. 31

A detailed cross-sectional view of a multi-layered composite material structure. The structure consists of alternating layers of a solid material (hatched with diagonal lines) and a layer of semi-rigid foam (hatched with cross-hatching). The foam layers are labeled with the reference numeral 212. The solid layers contain vertical structural elements, possibly fibers or rods, which are secured by horizontal plates or caps. The bottom of the structure features a series of semi-circular or hemispherical protrusions, which are labeled as "HALF-COATED SAGE FORMS".

A cross-sectional view of a multi-layered substrate assembly. The assembly consists of a top layer (hatched with diagonal lines), a middle layer (hatched with horizontal lines), and a bottom layer (hatched with diagonal lines). Four vertical vias are formed through the layers. Each via is filled with a conductive paste (hatched with diagonal lines) and has a conductive cap (hatched with horizontal lines) on its top surface. A label '210' points to the top layer.

FIG. 32

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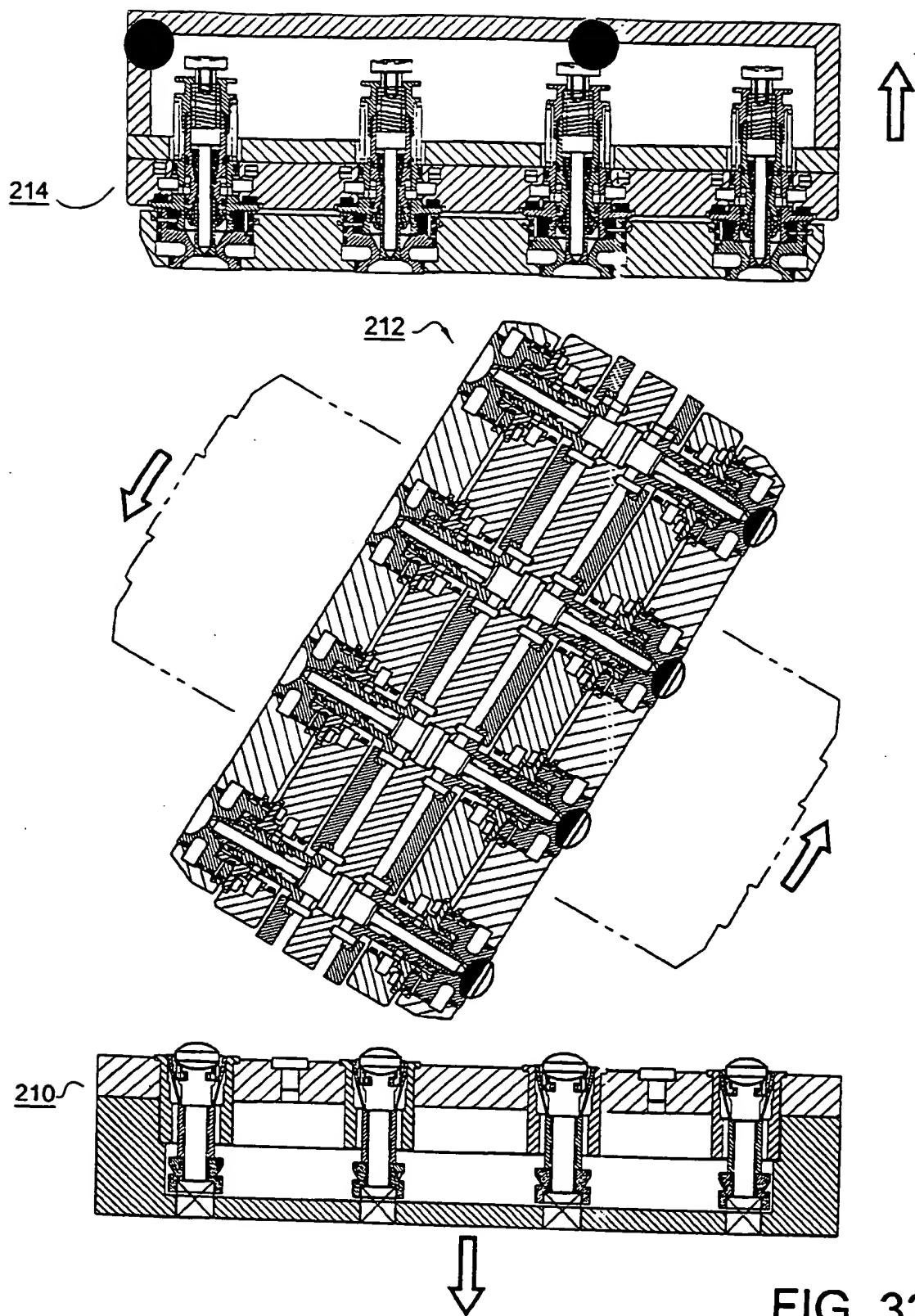


FIG. 33

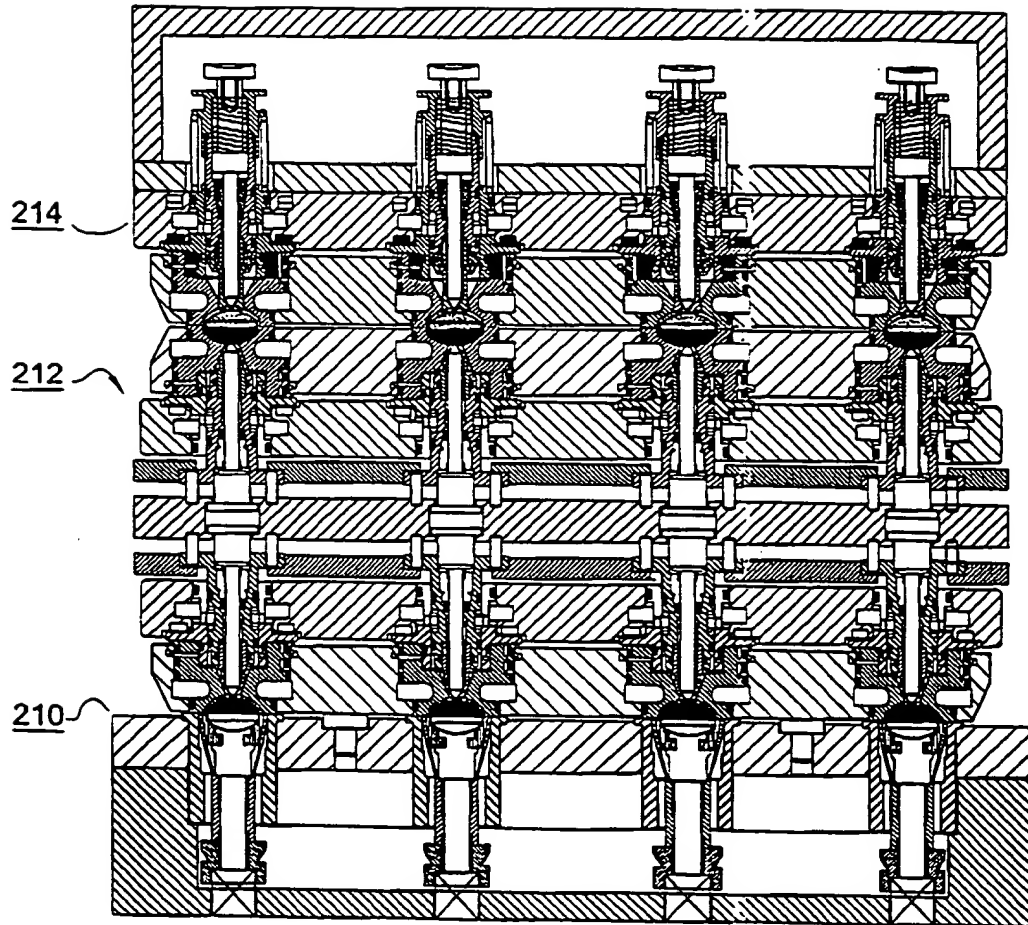


FIG. 34

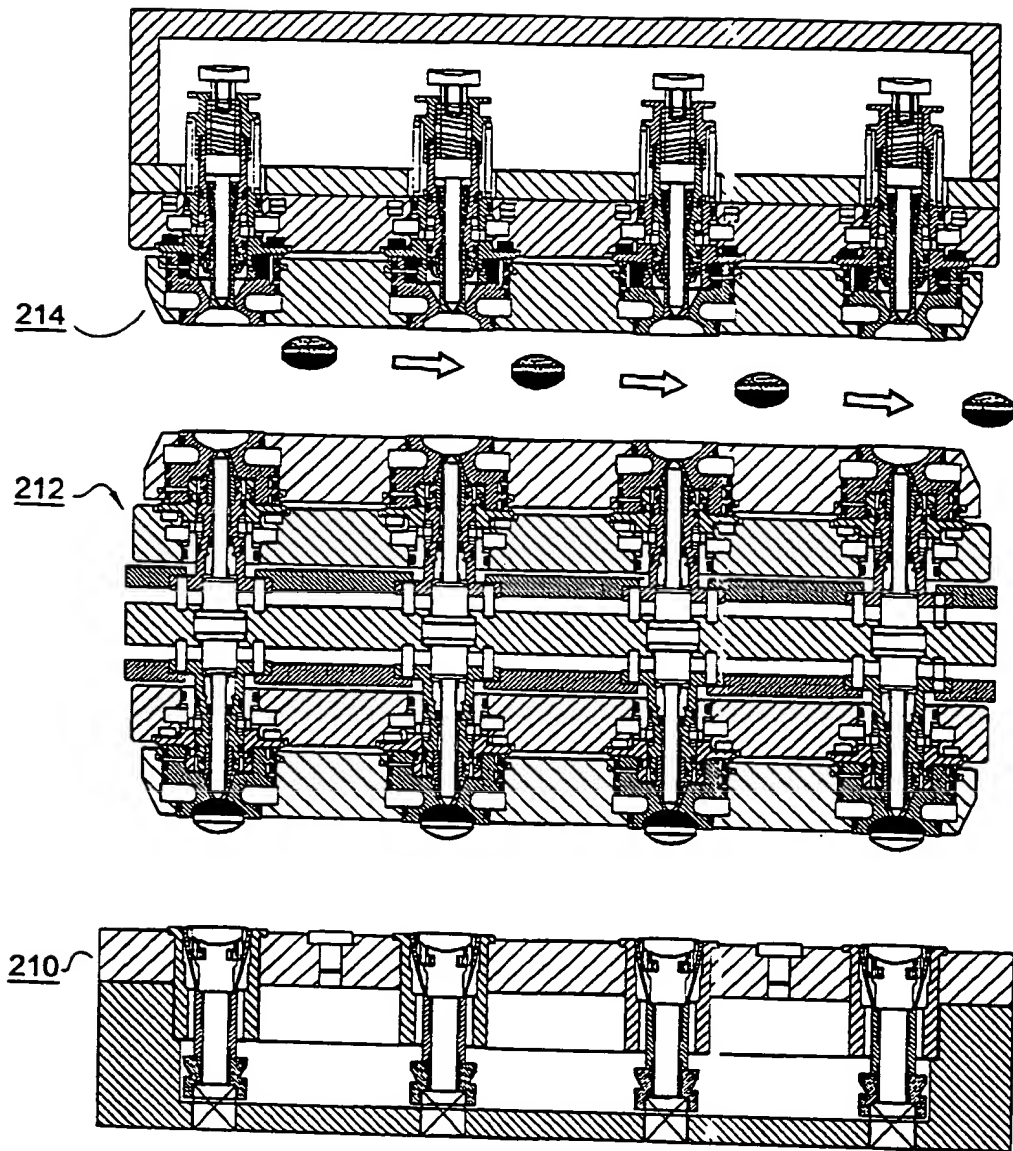
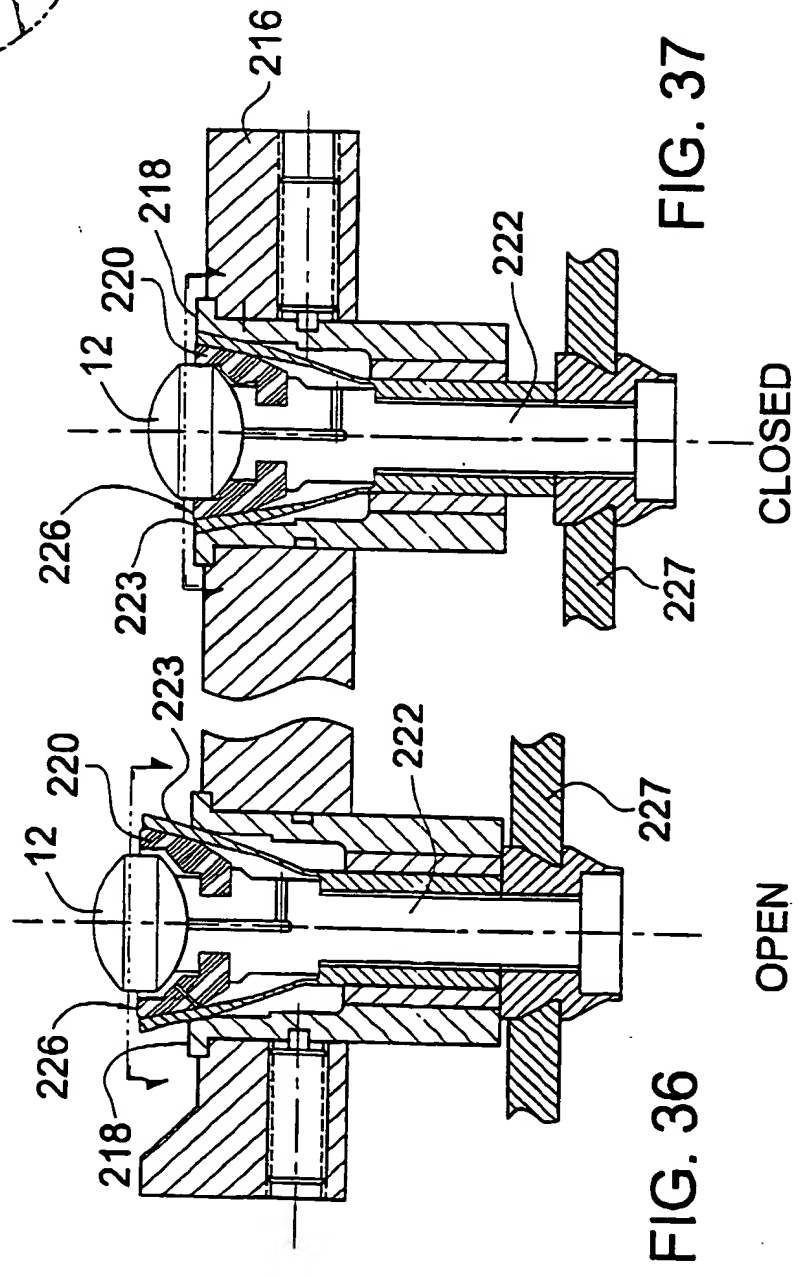
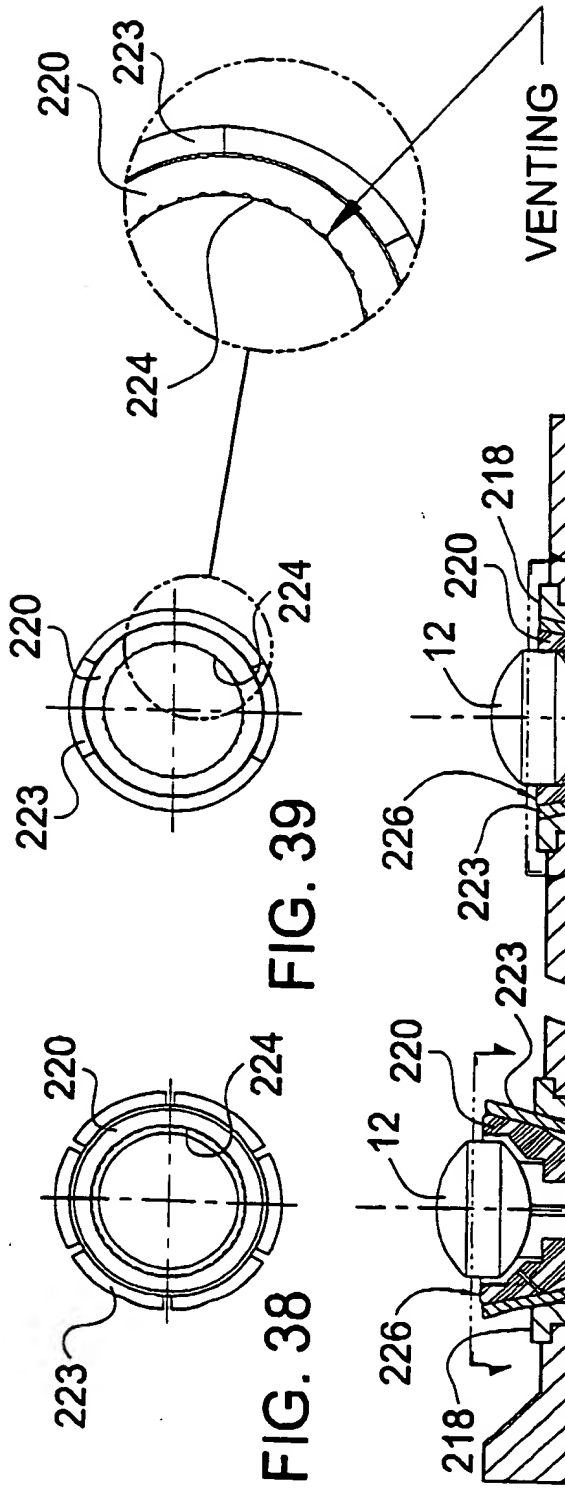


FIG. 35



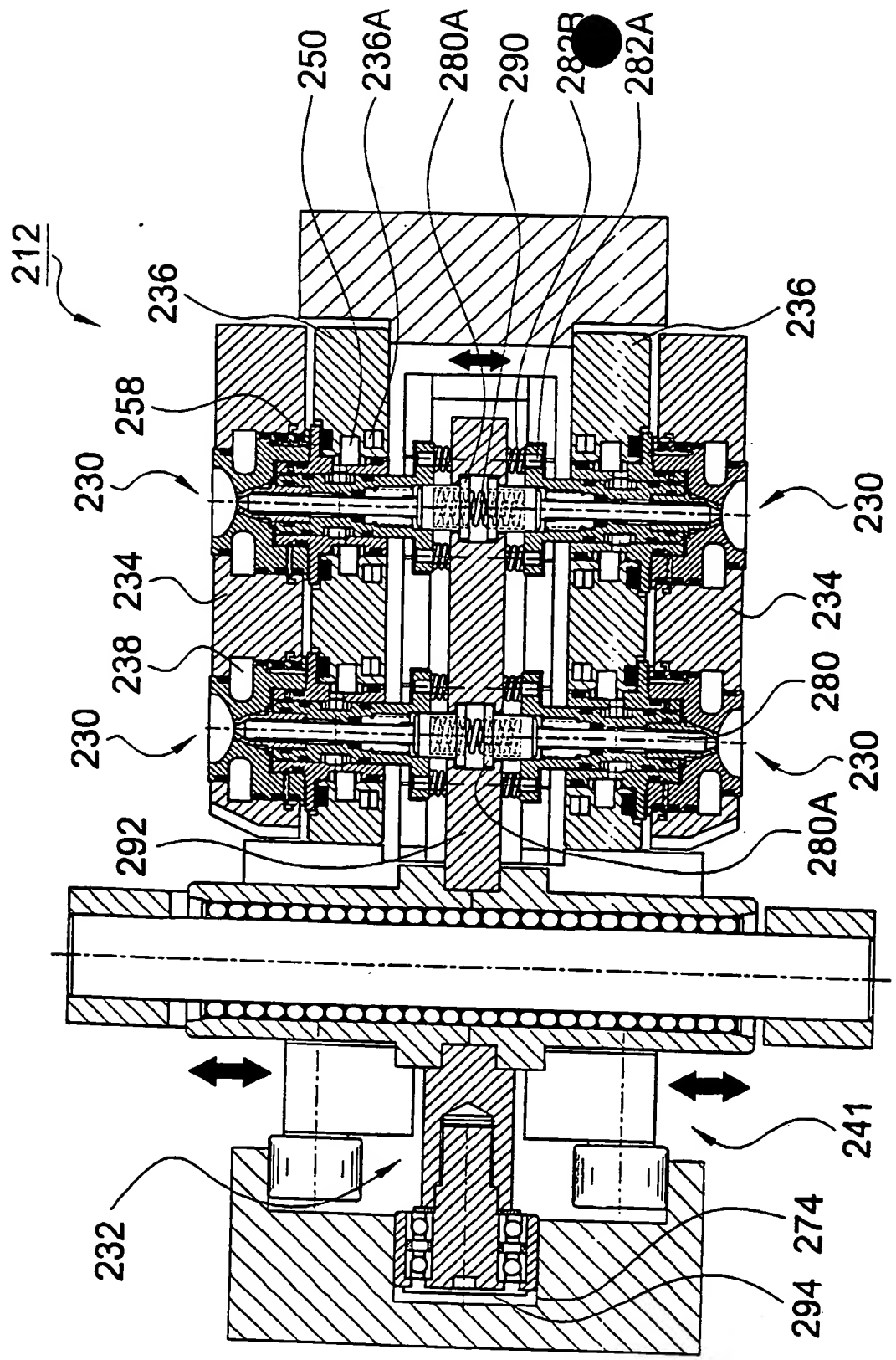


FIG. 41

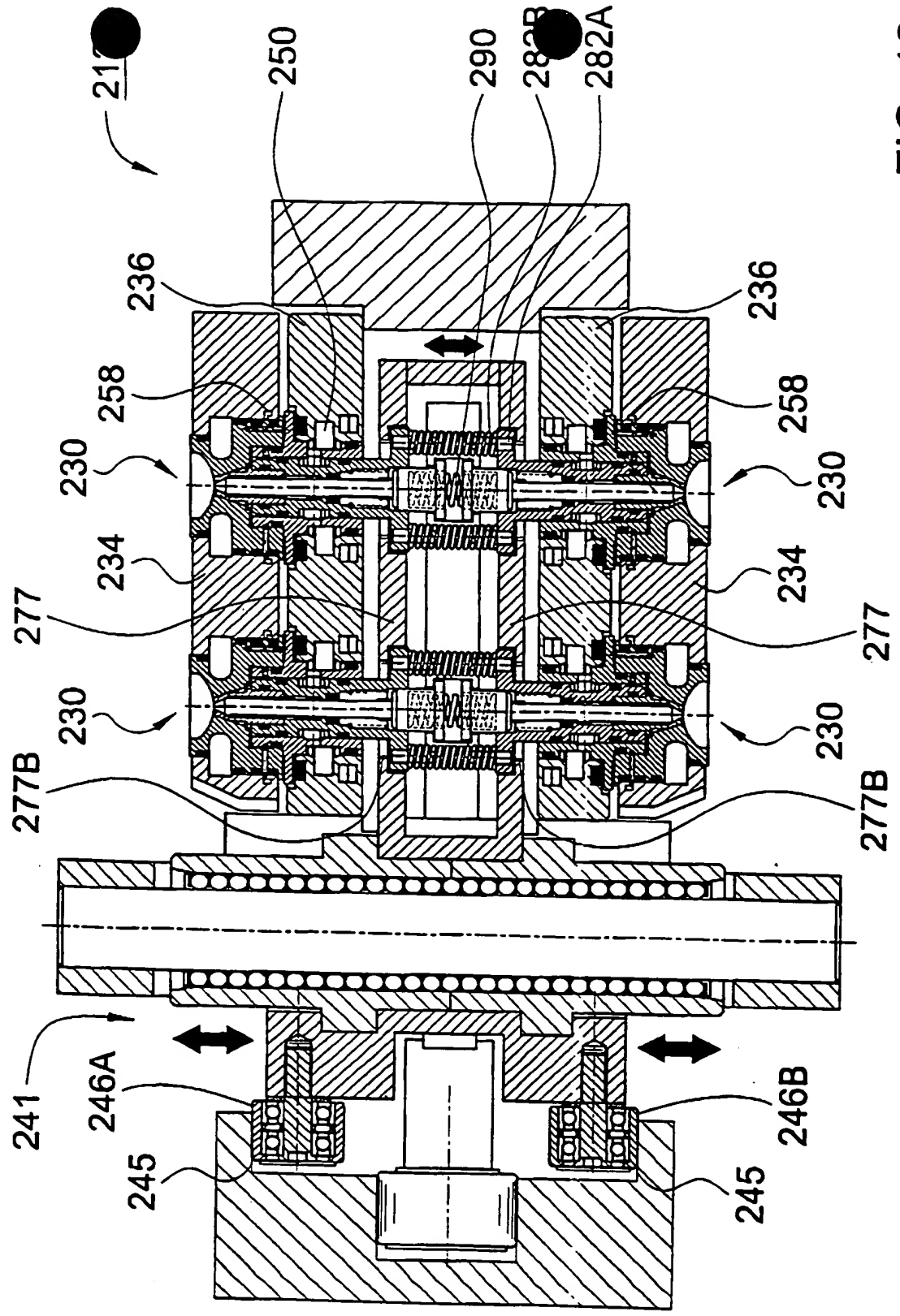


FIG. 42

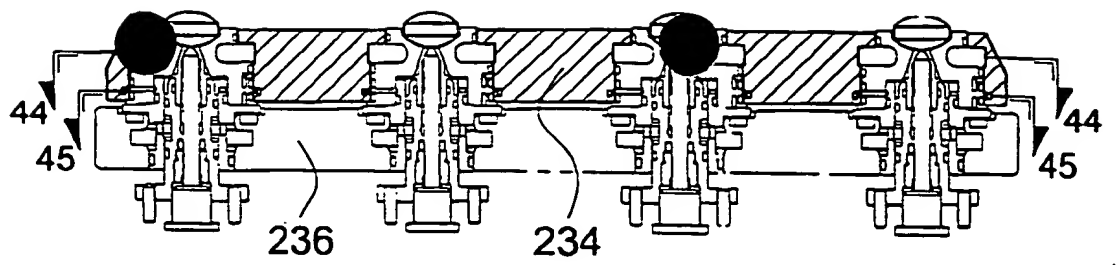


FIG. 43

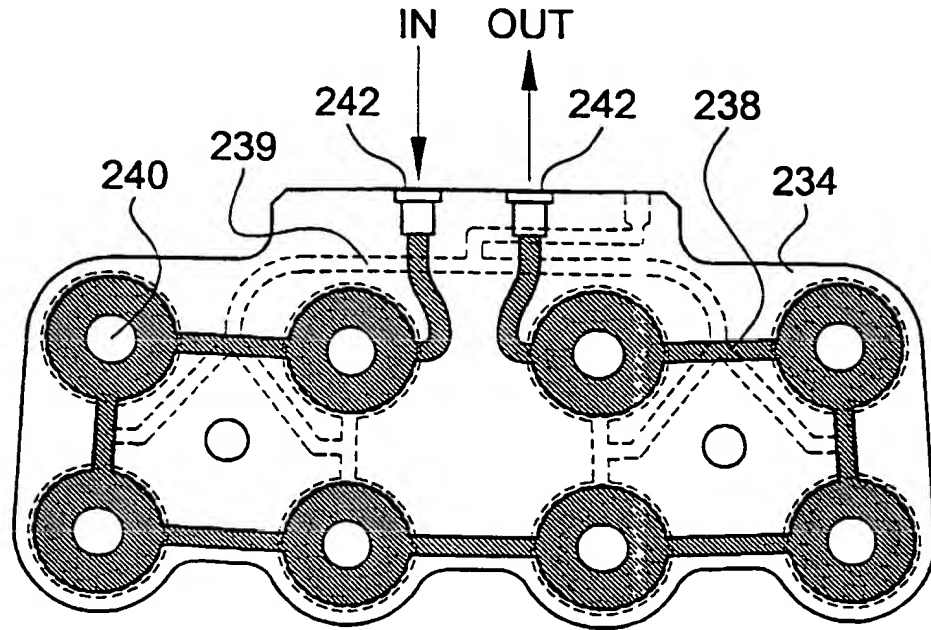


FIG. 44

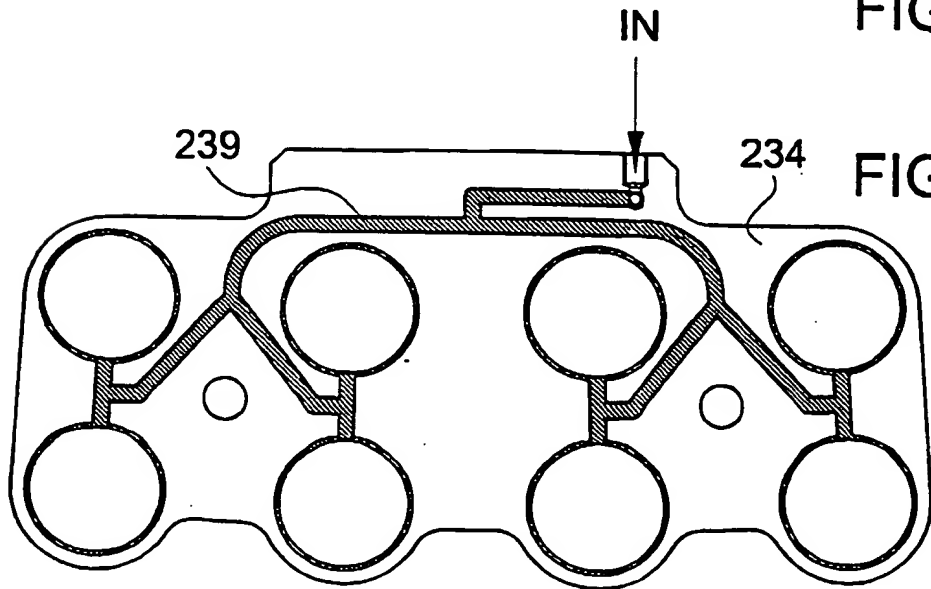
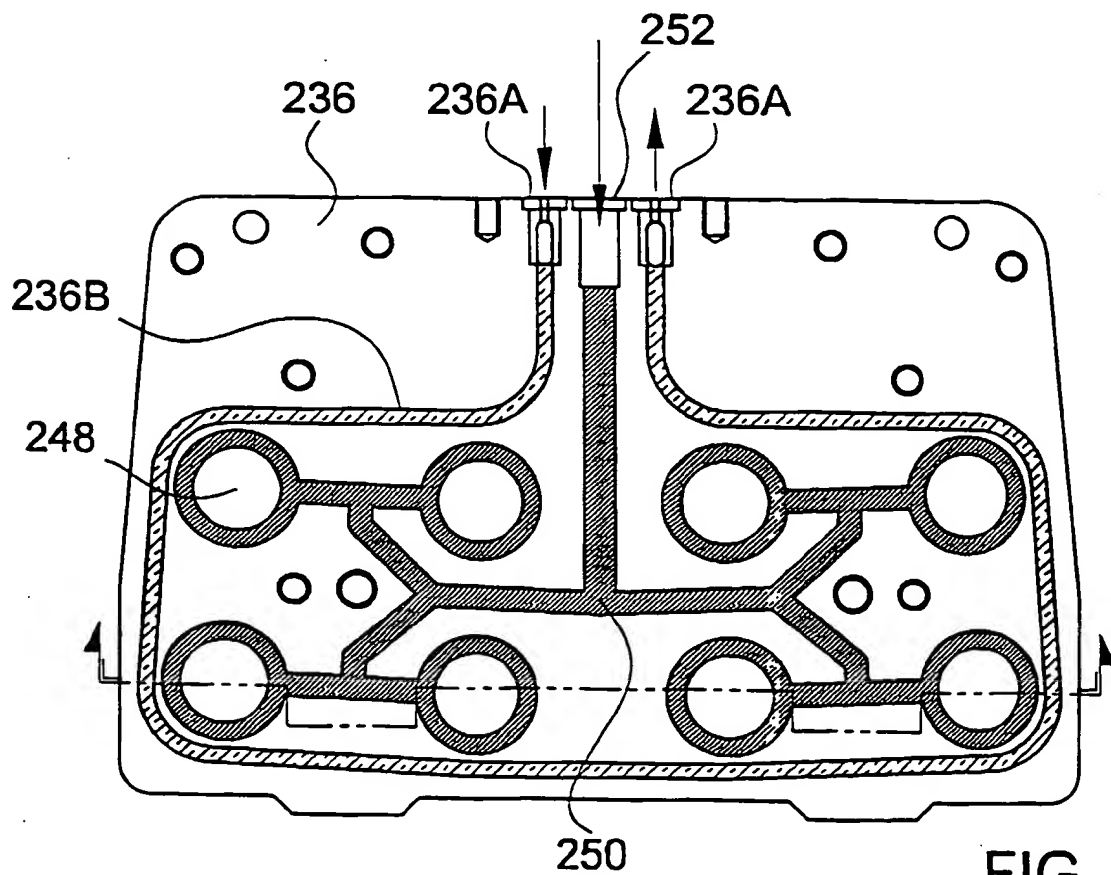
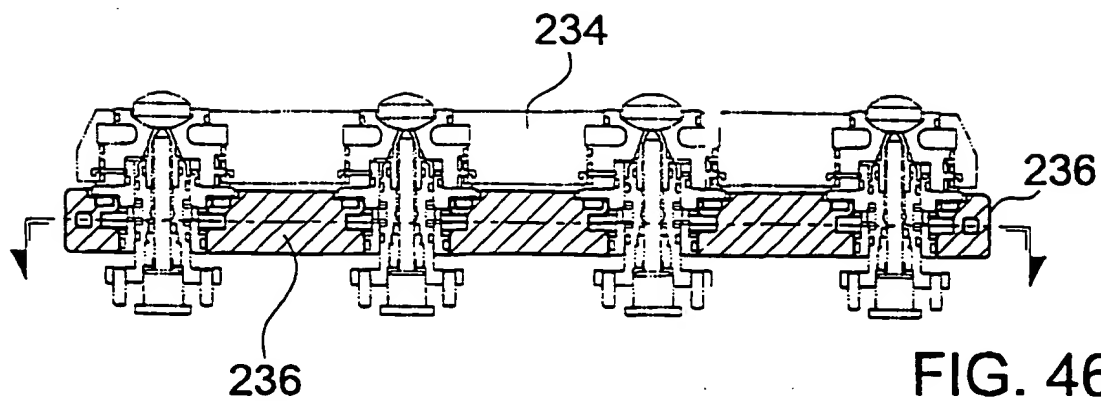


FIG. 45



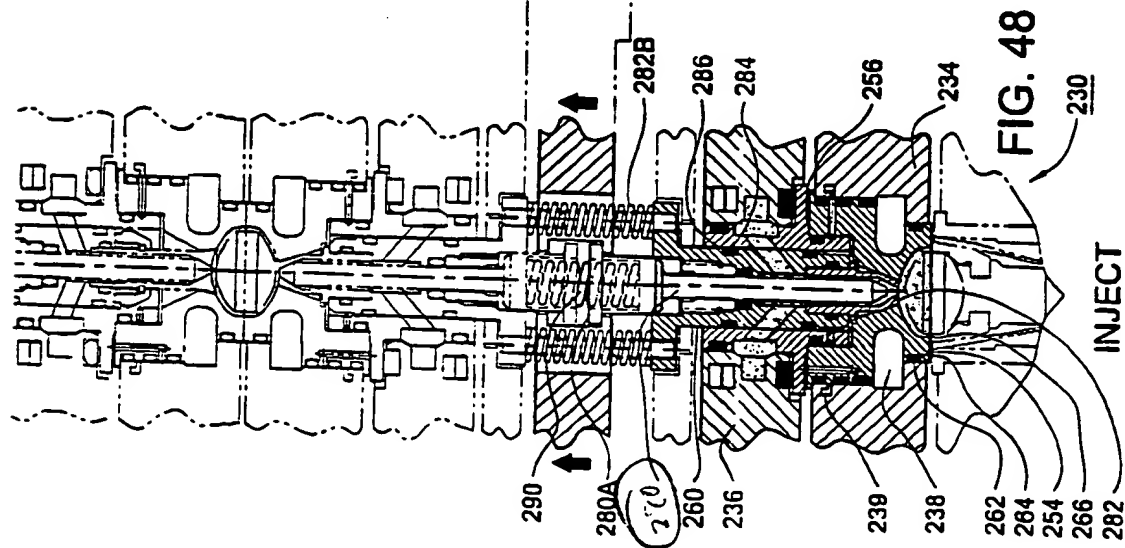
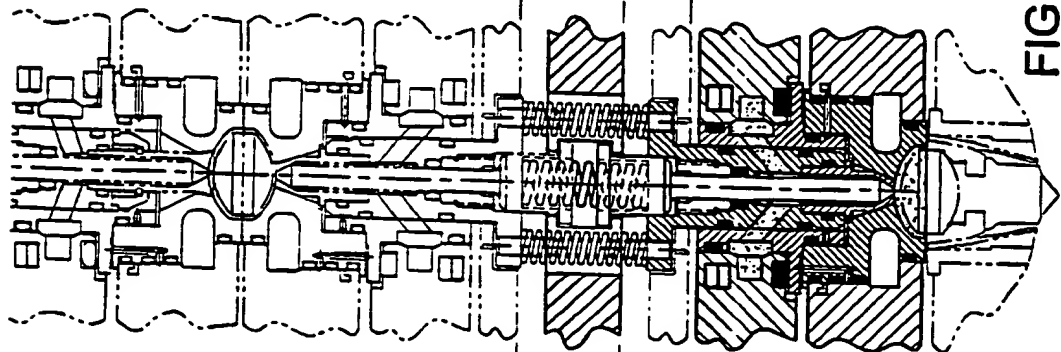


FIG. 49



CLOSED

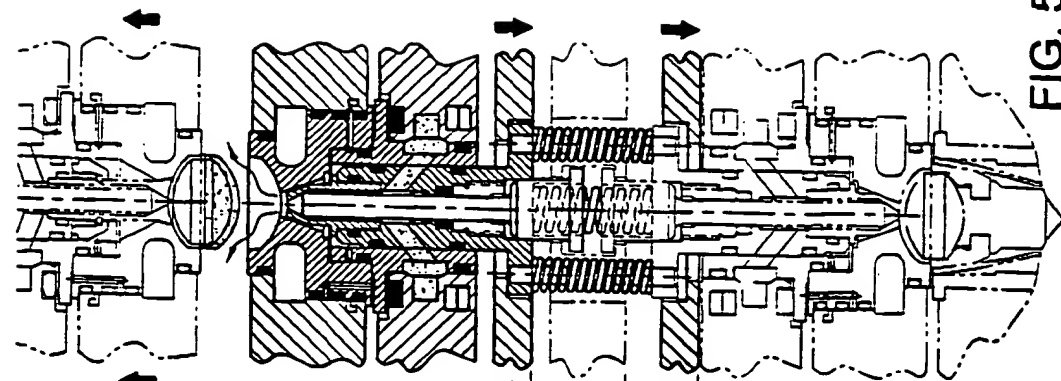


FIG. 50

TRANSFER

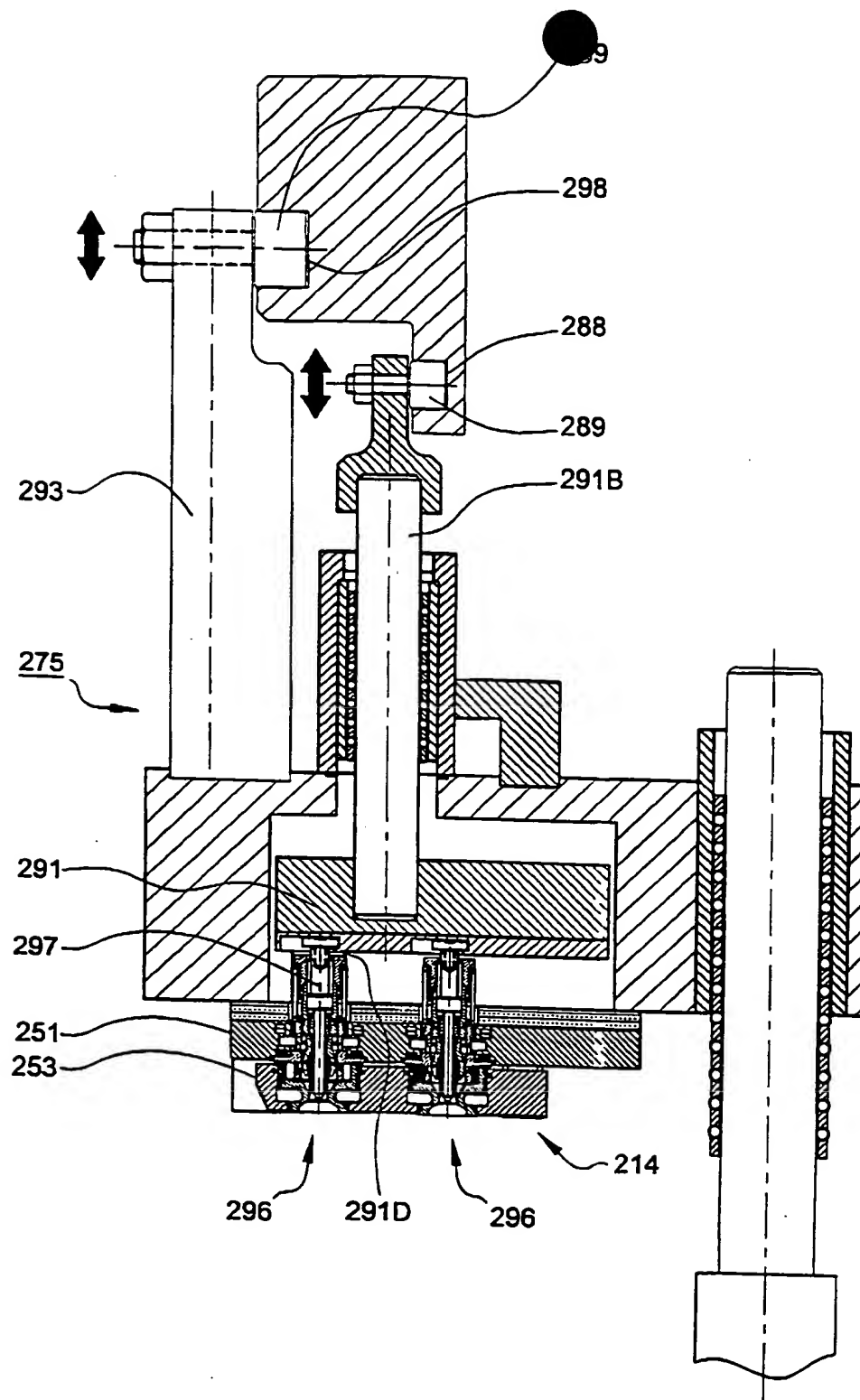


FIG. 51

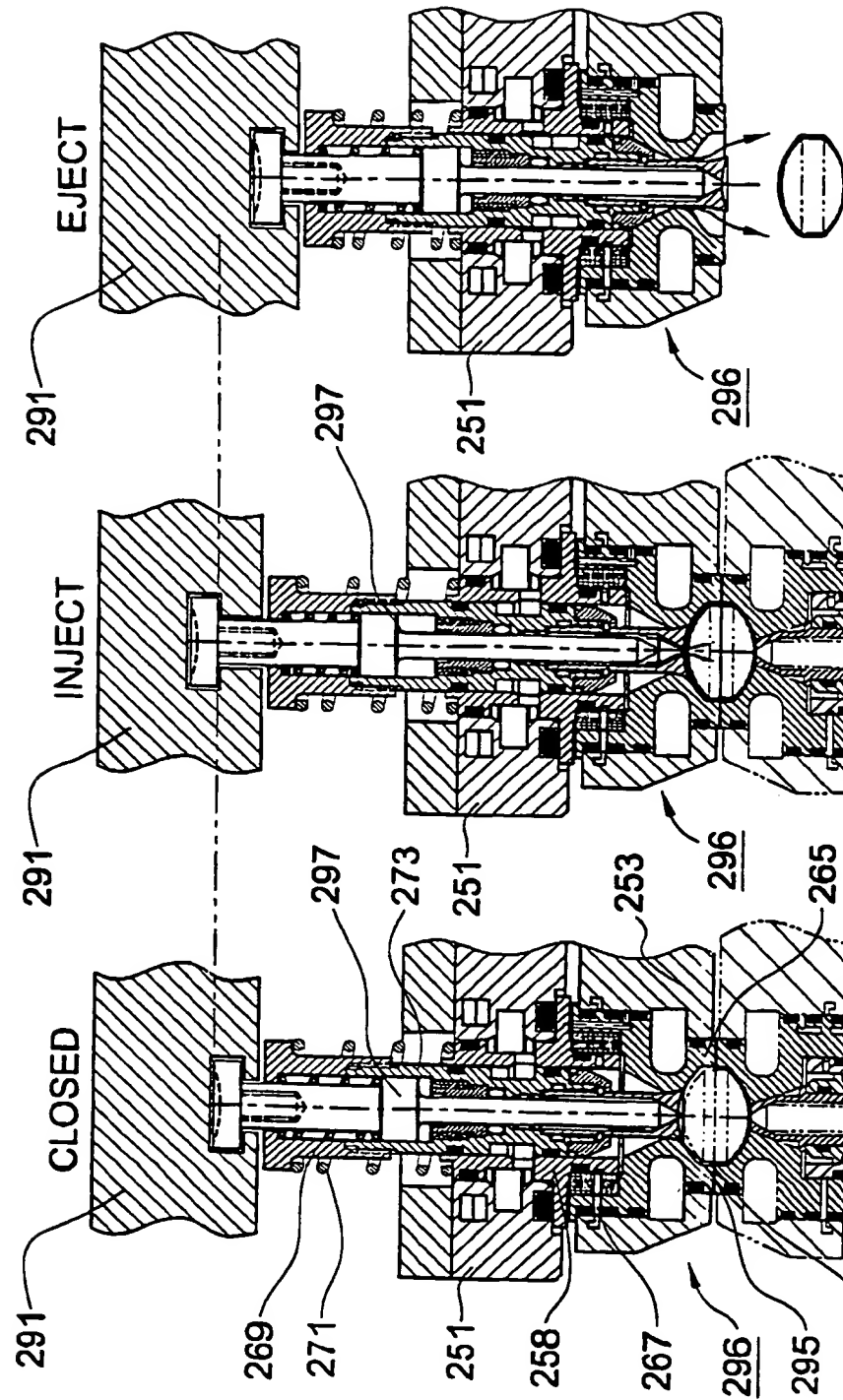


FIG. 52

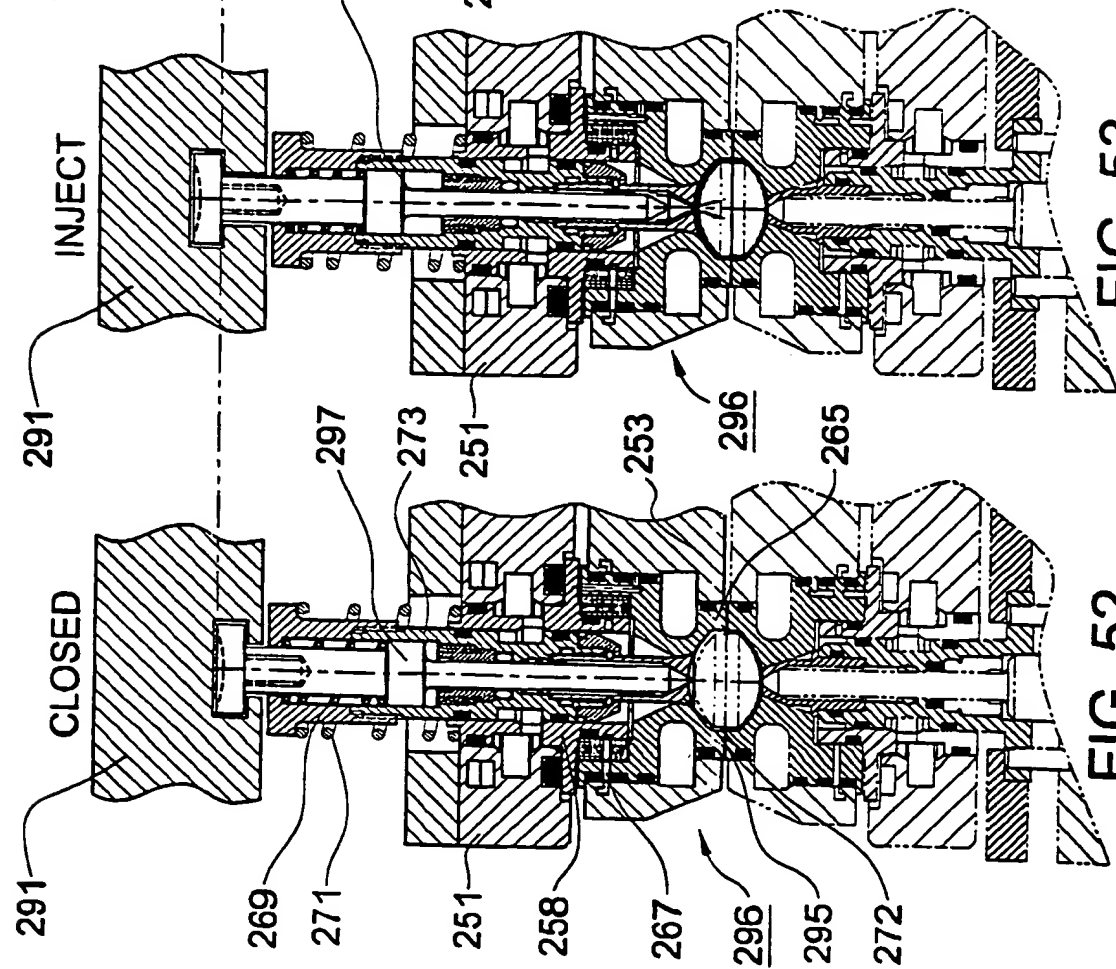


FIG. 53

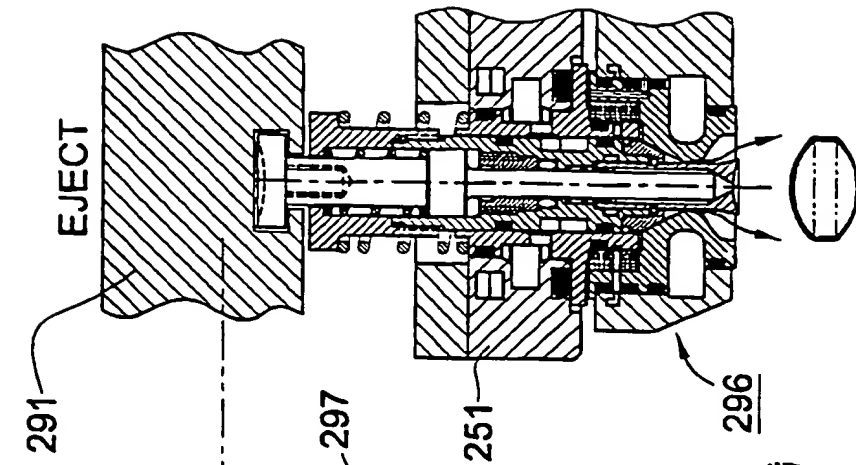


FIG. 54

HOT CYCLE

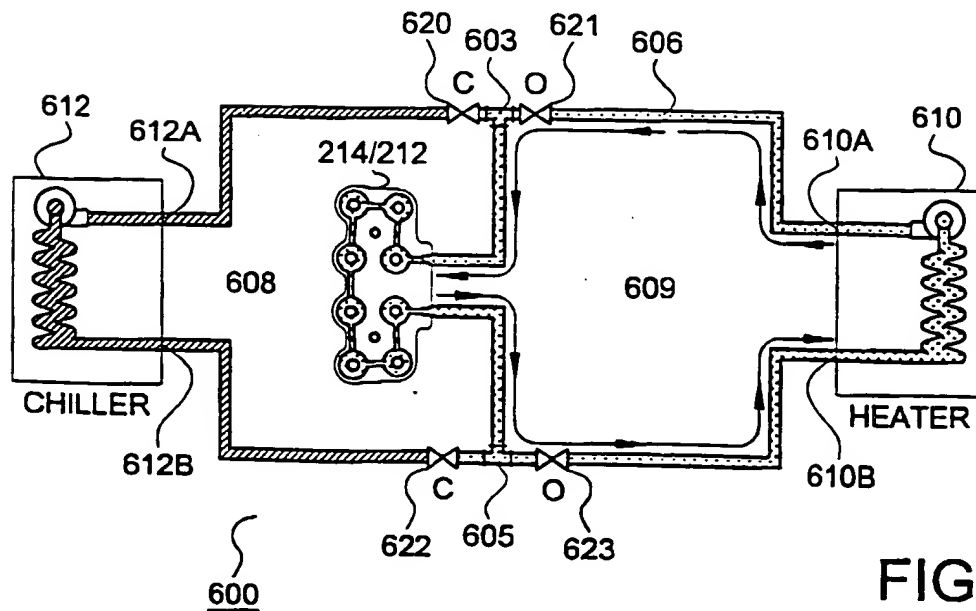


FIG. 55

COLD CYCLE

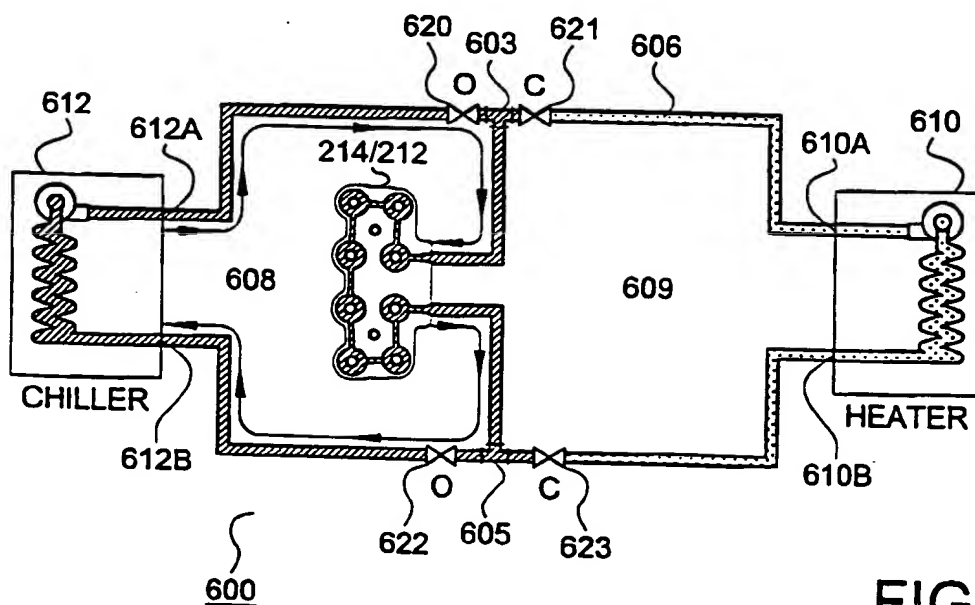


FIG. 56

O= VALVE OPEN
C= VALVE CLOSED

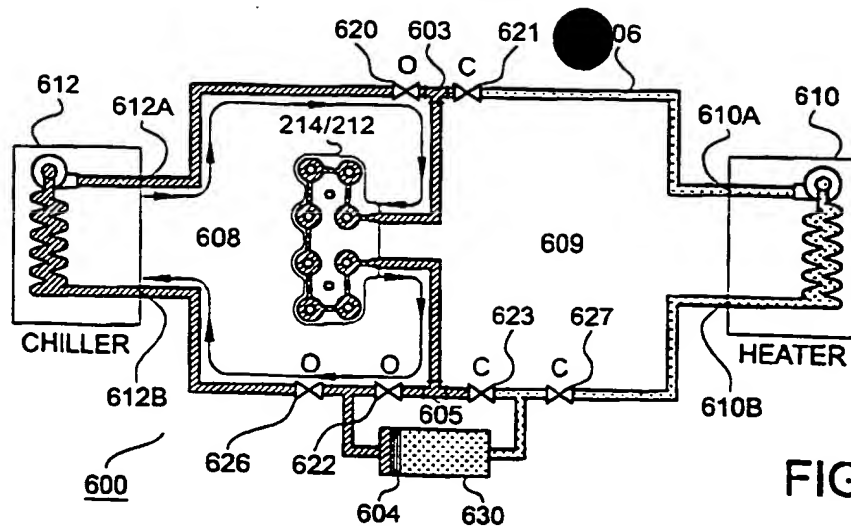


FIG. 57

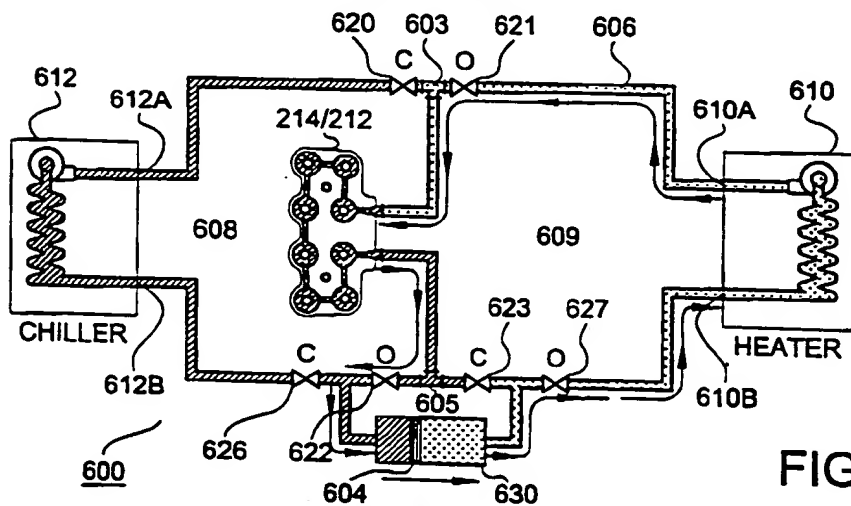


FIG. 58

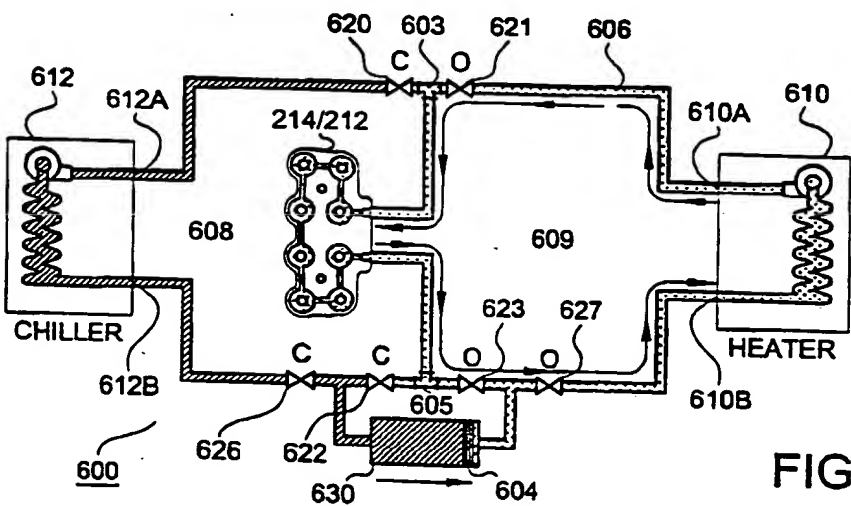
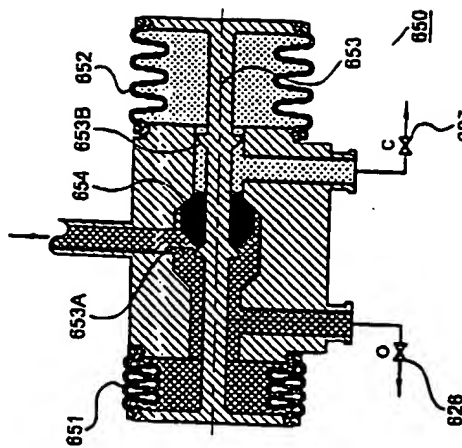
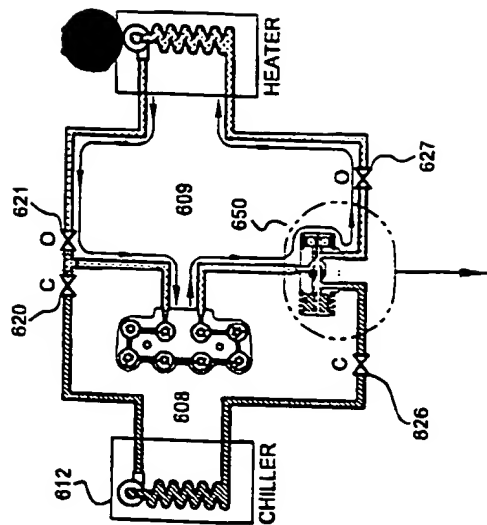
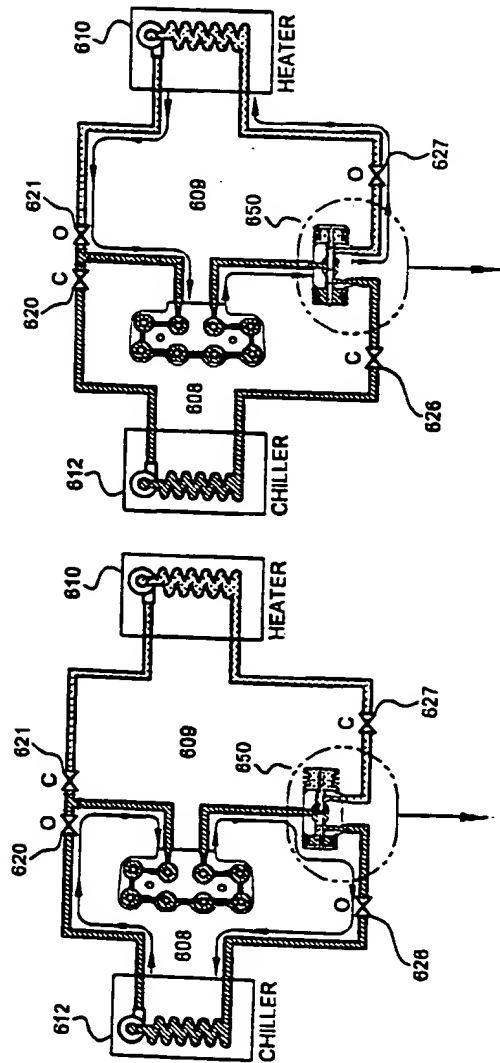


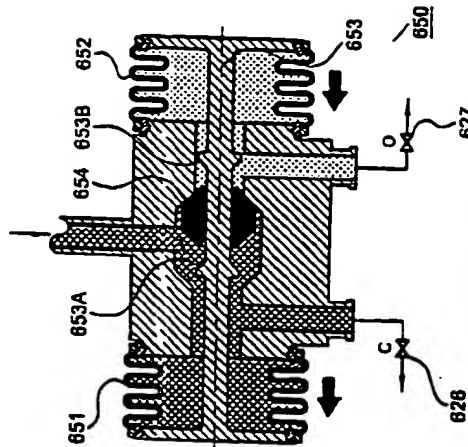
FIG. 59

O= VALVE OPEN
C= VALVE CLOSED



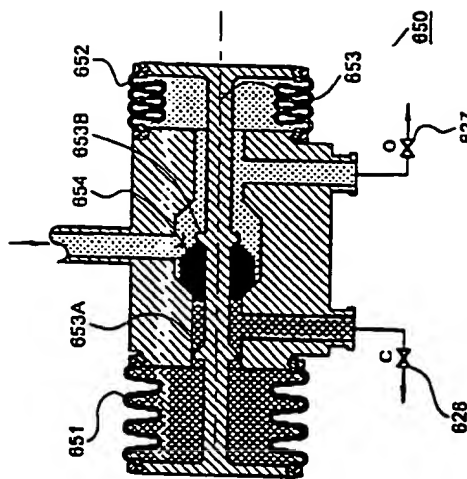
O= VALVE OPEN
C= VALVE CLOSED

FIG. 60



O= VALVE OPEN
C= VALVE CLOSED

FIG. 61



O= VALVE OPEN
C= VALVE CLOSED

FIG. 62

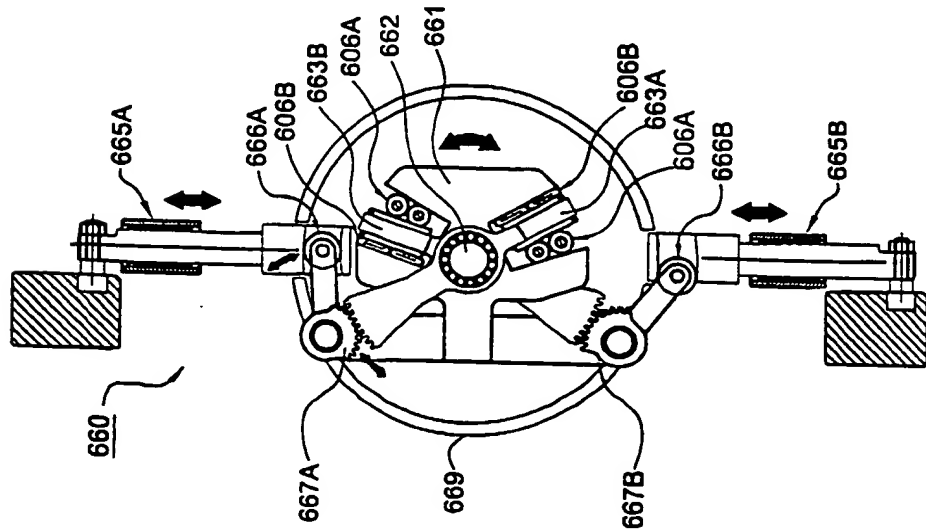


FIG. 63

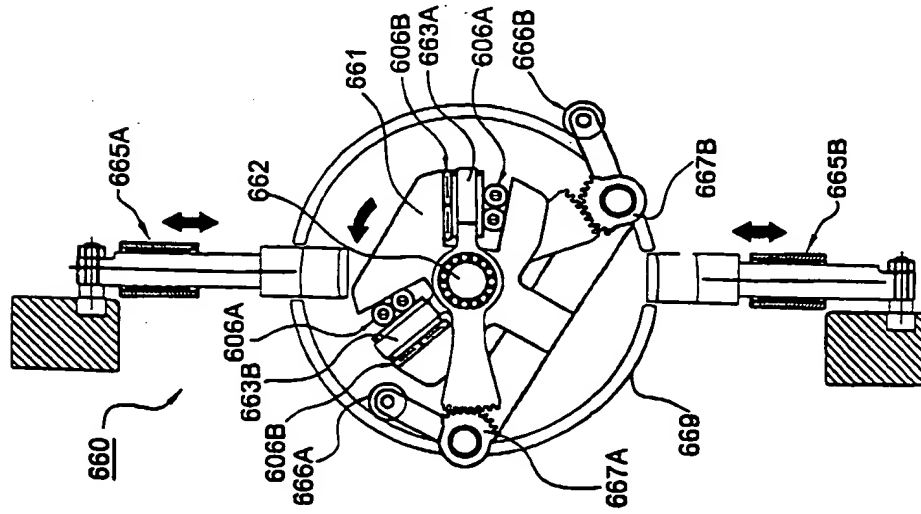


FIG. 64

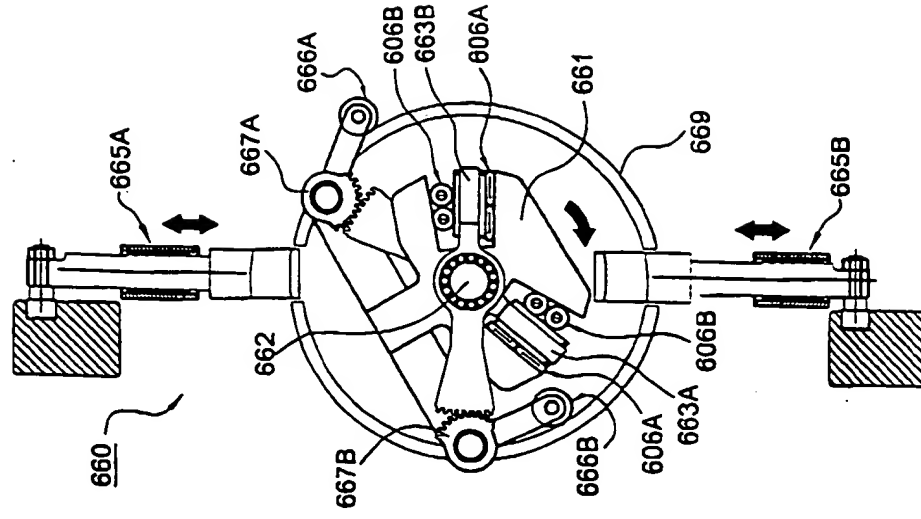


FIG. 65

FIG. 68

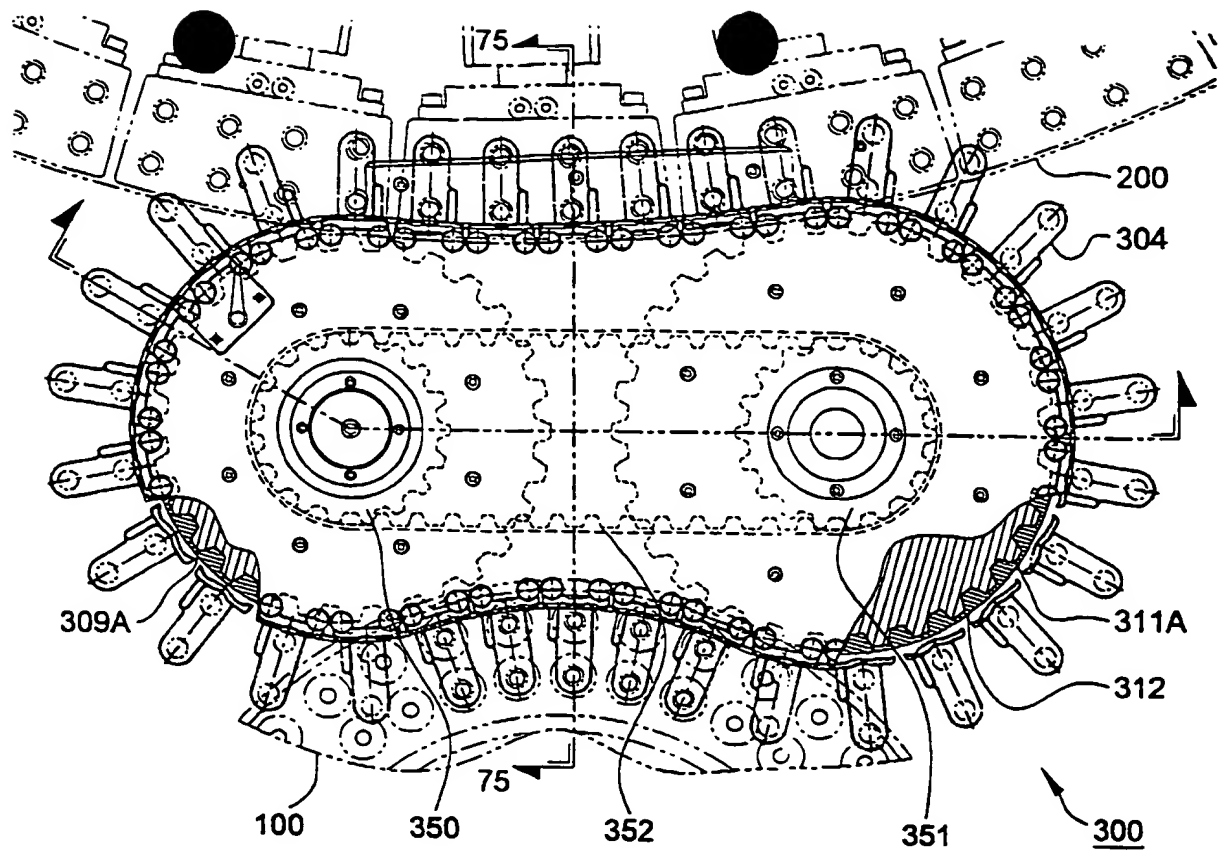


FIG. 68

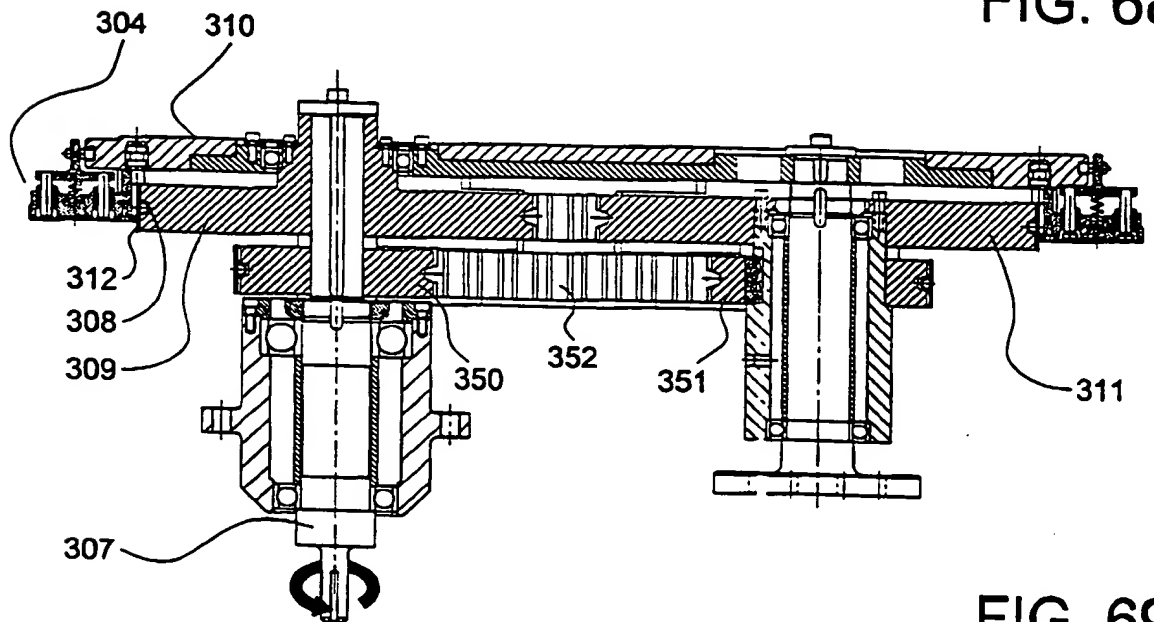


FIG. 69

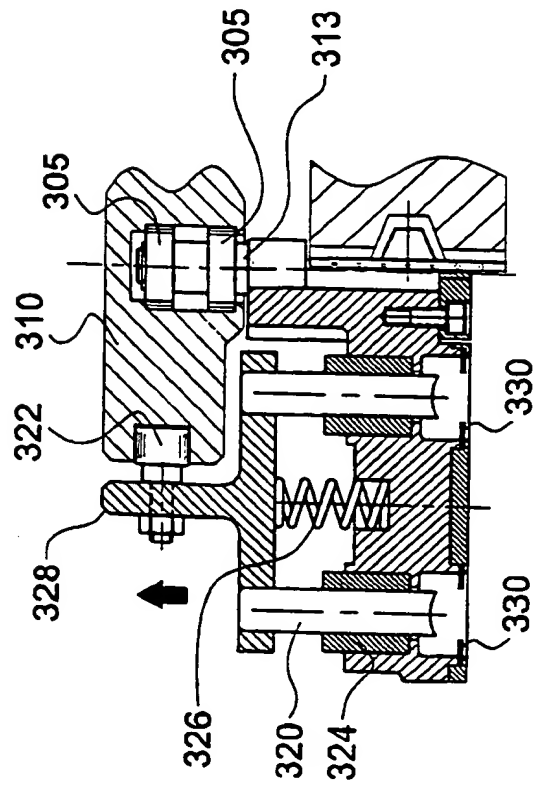


FIG. 70

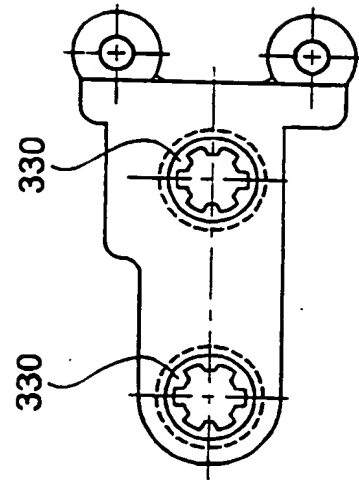


FIG. 71

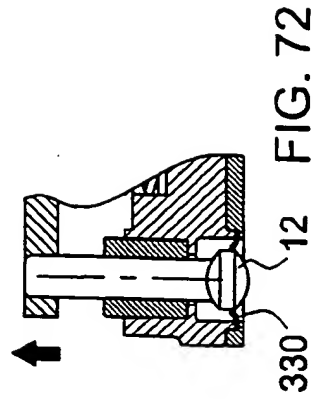


FIG. 72

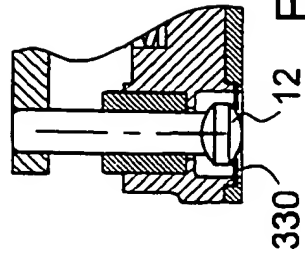


FIG. 73

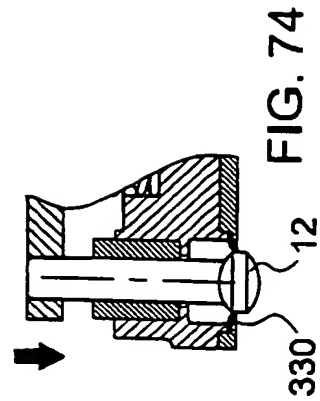


FIG. 74

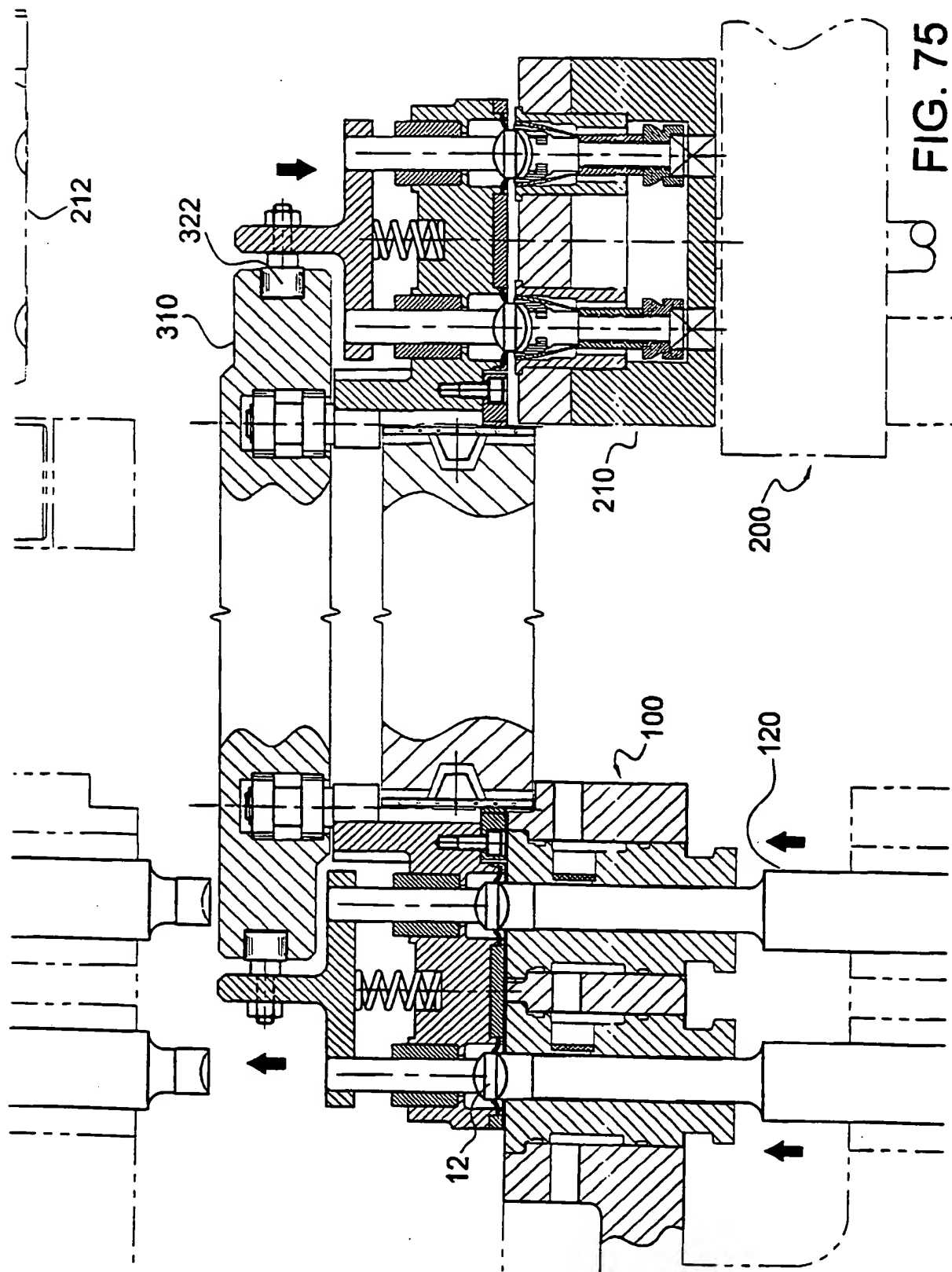


FIG. 75

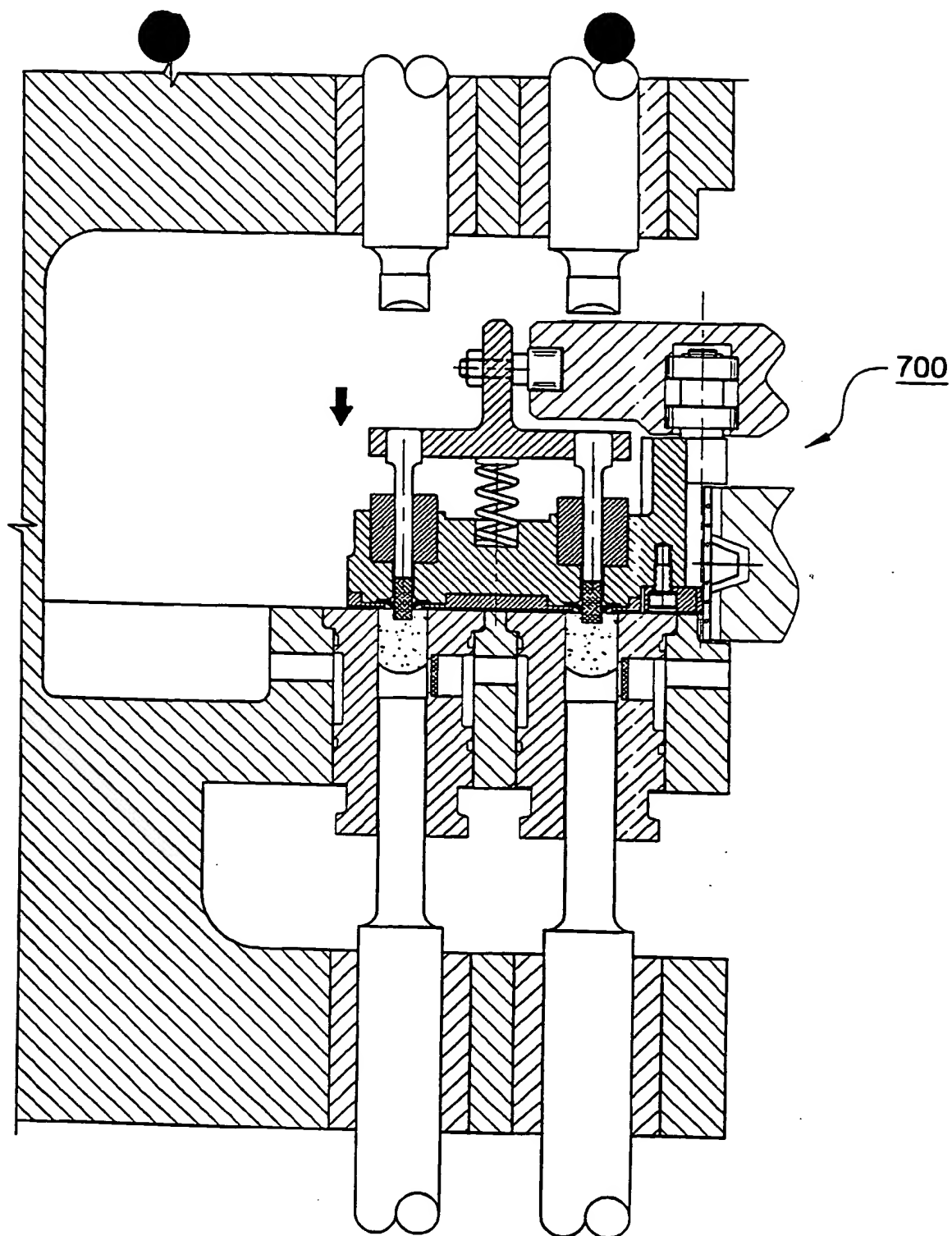


FIG. 76

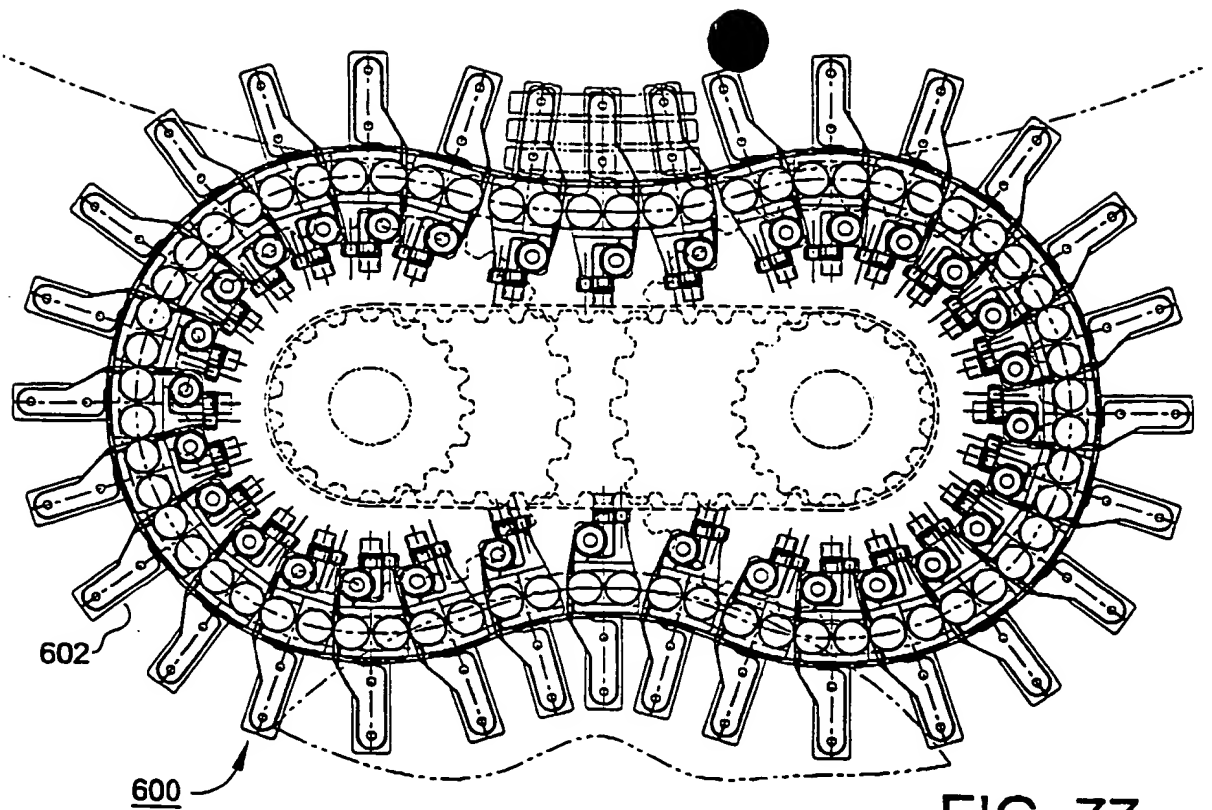


FIG. 77

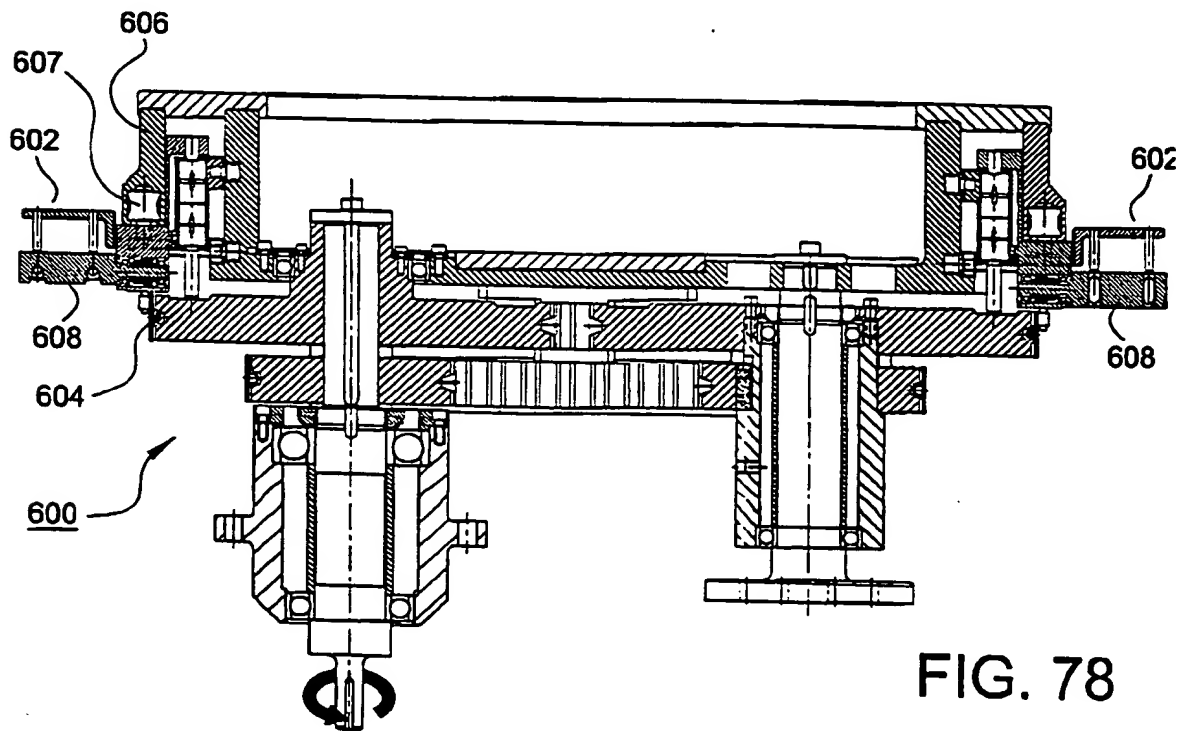


FIG. 78

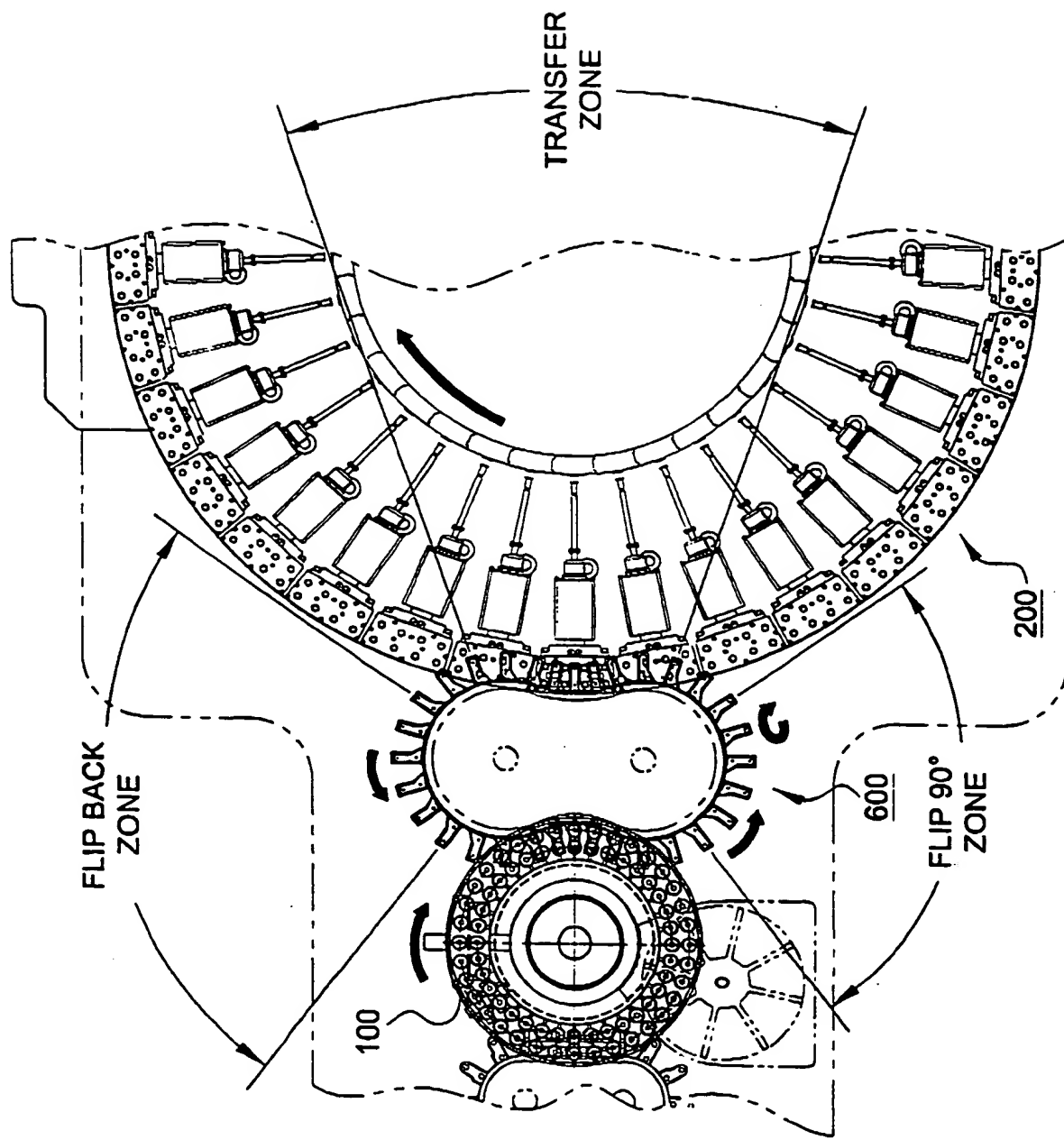


FIG. 79

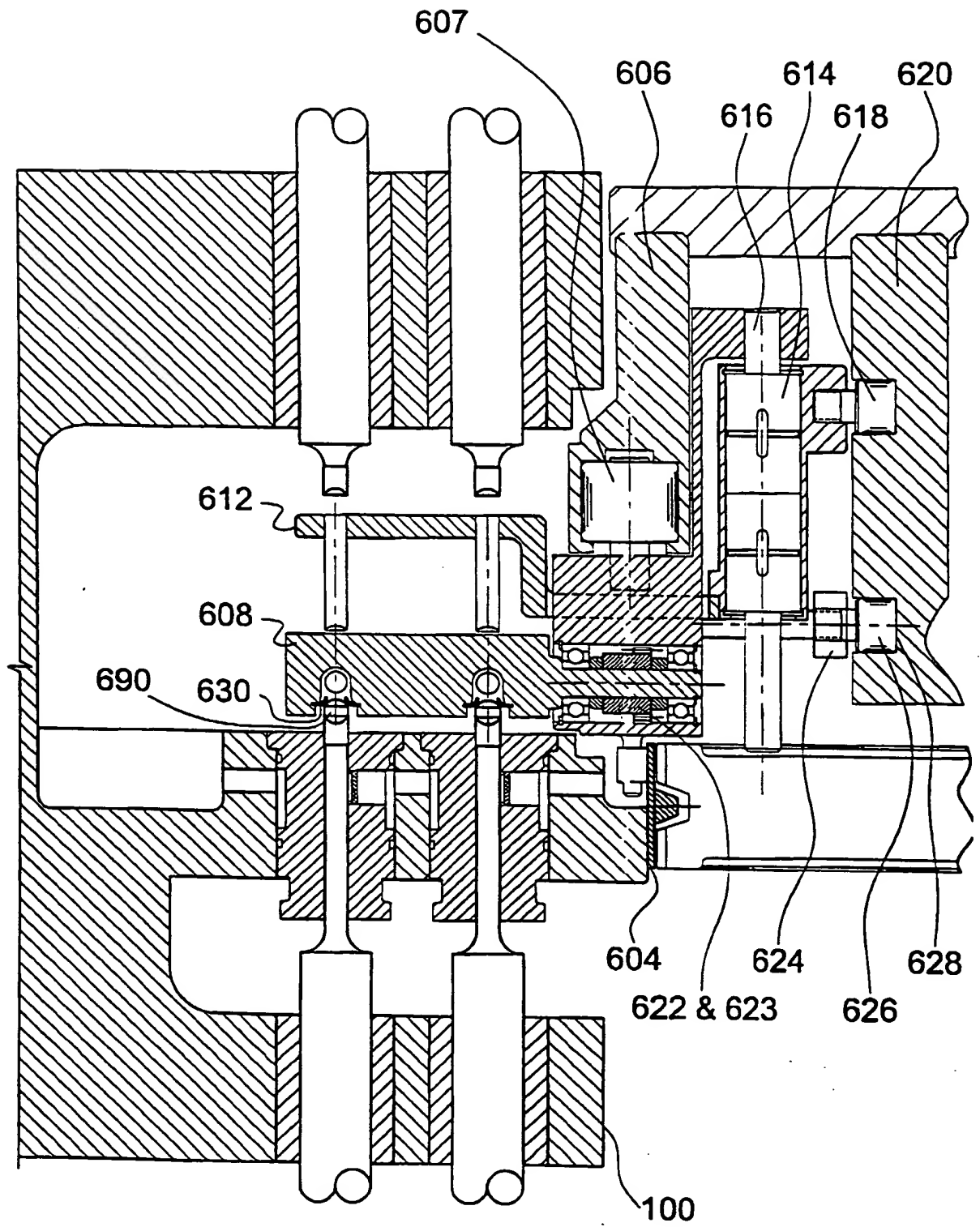


FIG. 80

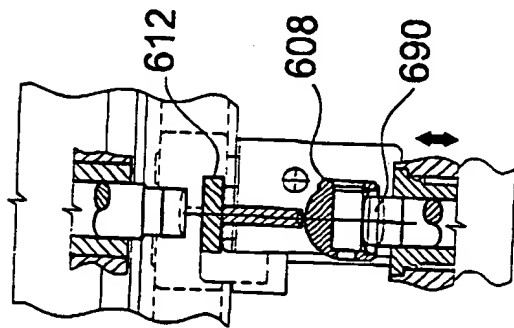


FIG. - 81A

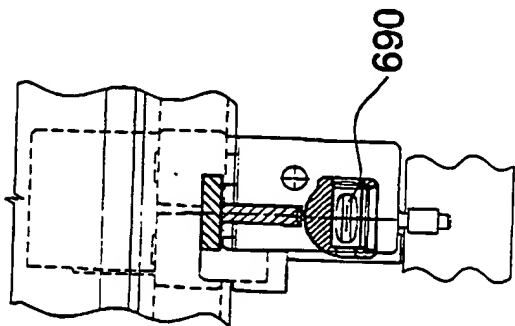


FIG. - 81B

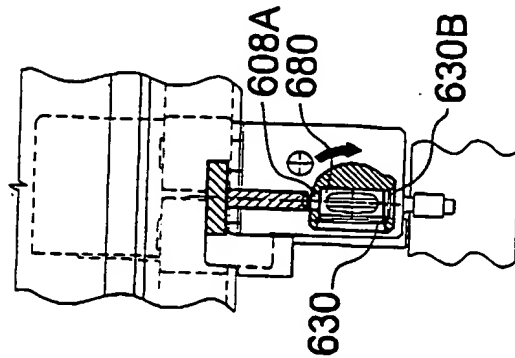


FIG. - 81C

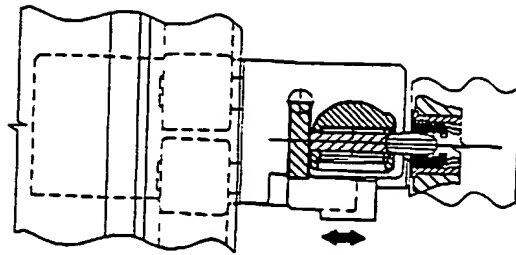


FIG. - 81D

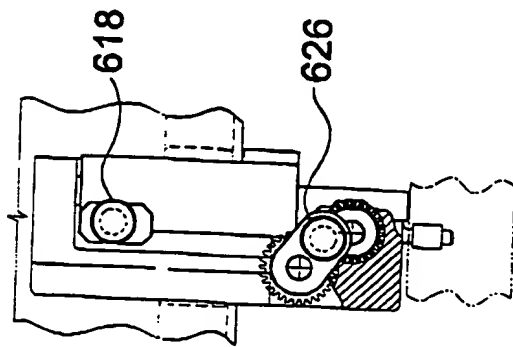


FIG. - 81E

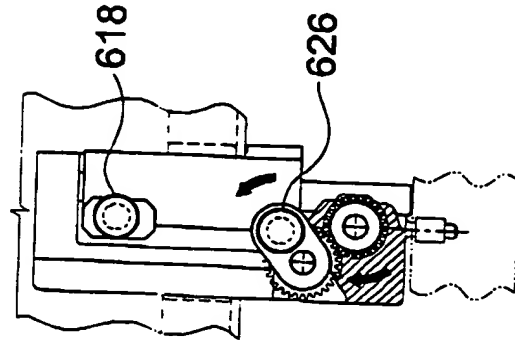


FIG. - 81F

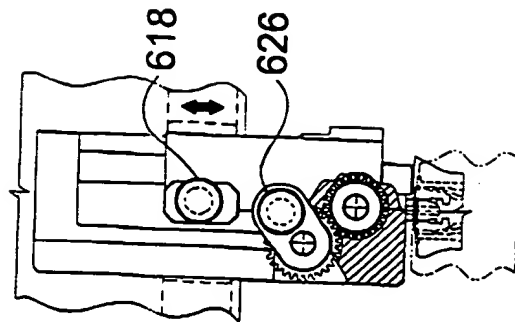


FIG. - 81G

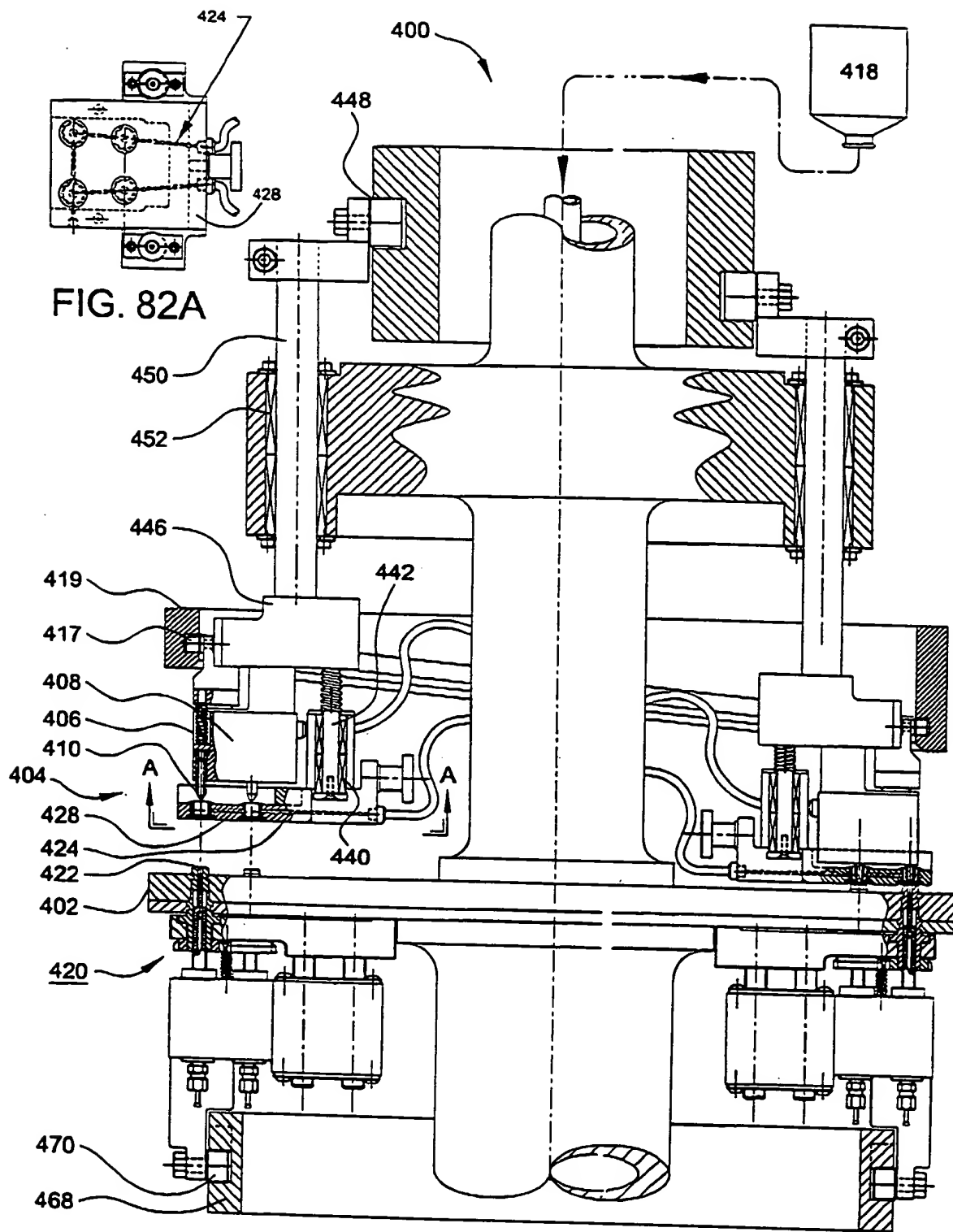


FIG. 82

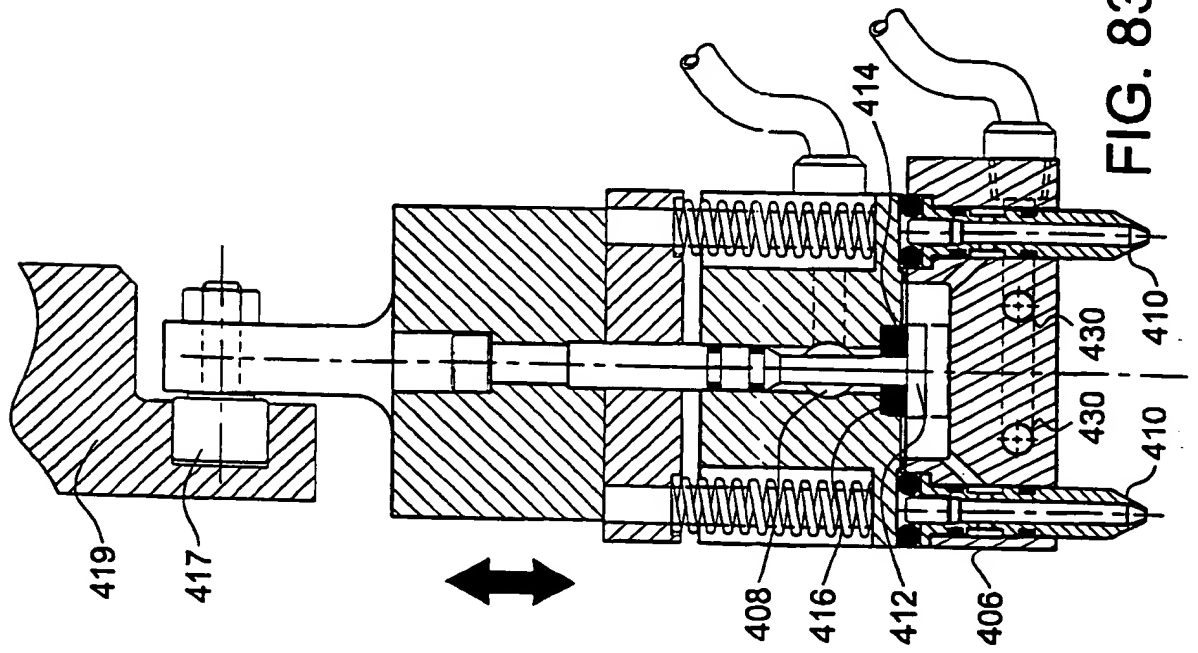


FIG. 83

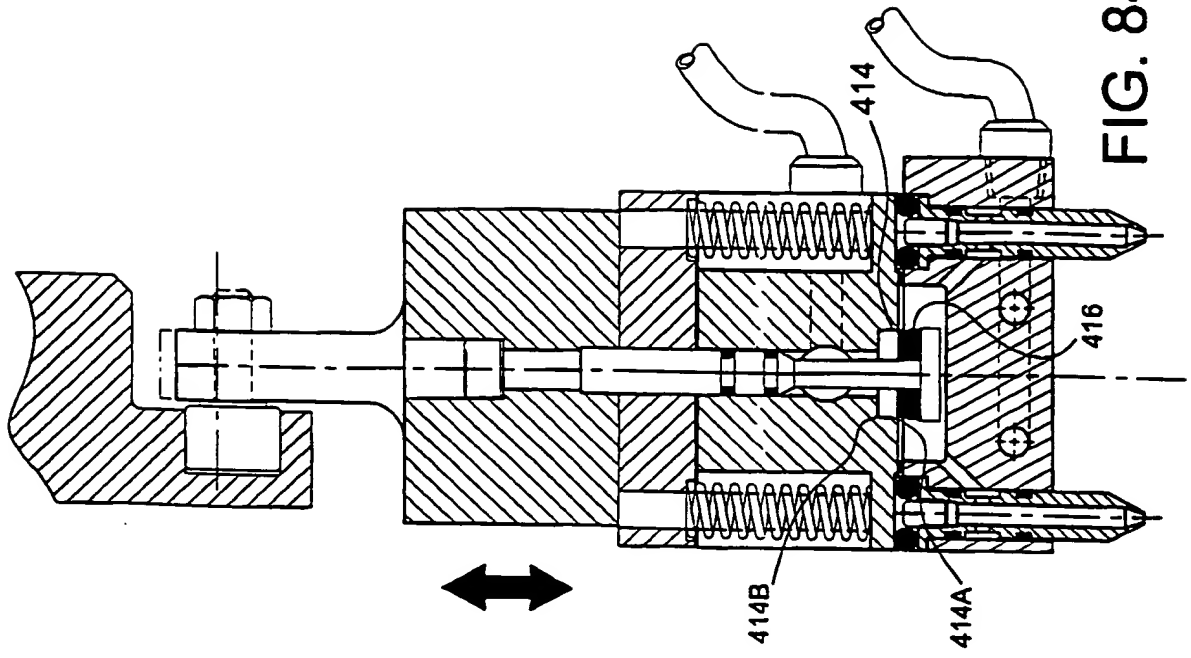


FIG. 84

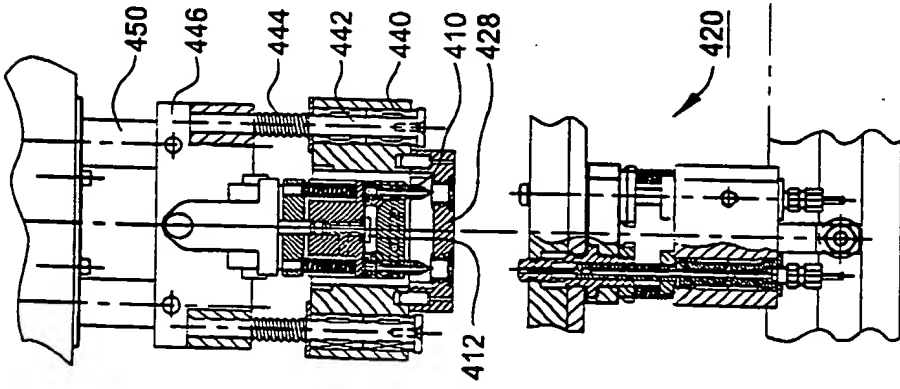


FIG.- 85A

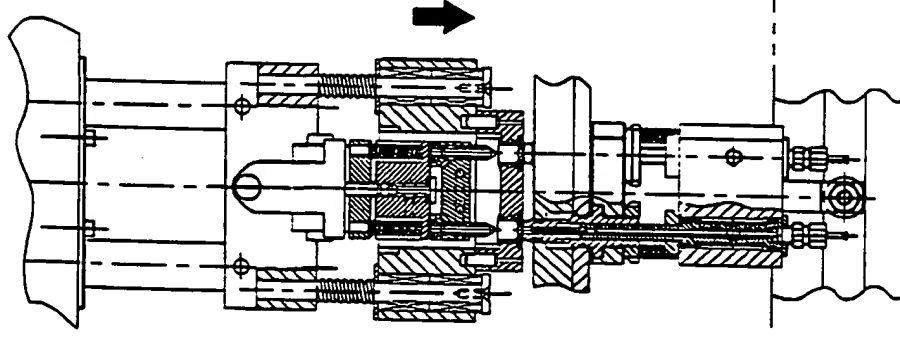


FIG. - 85B

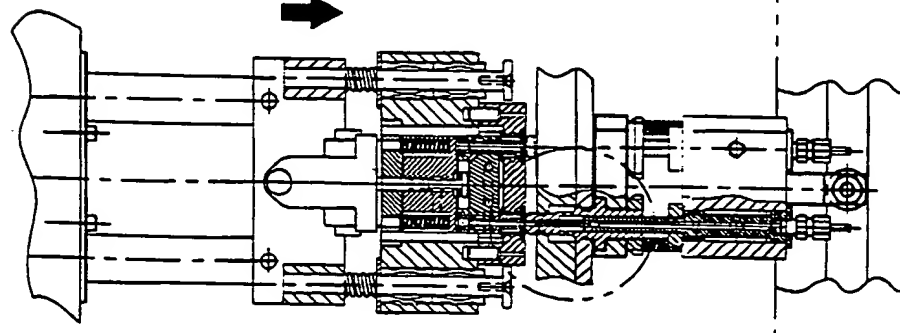


FIG.- 85C

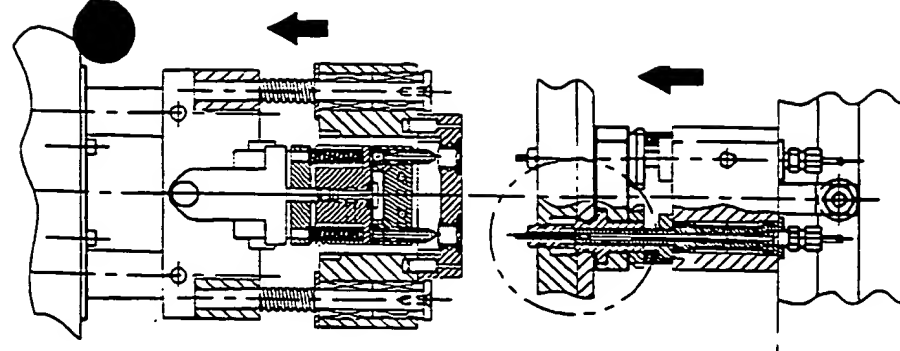


FIG.-85D

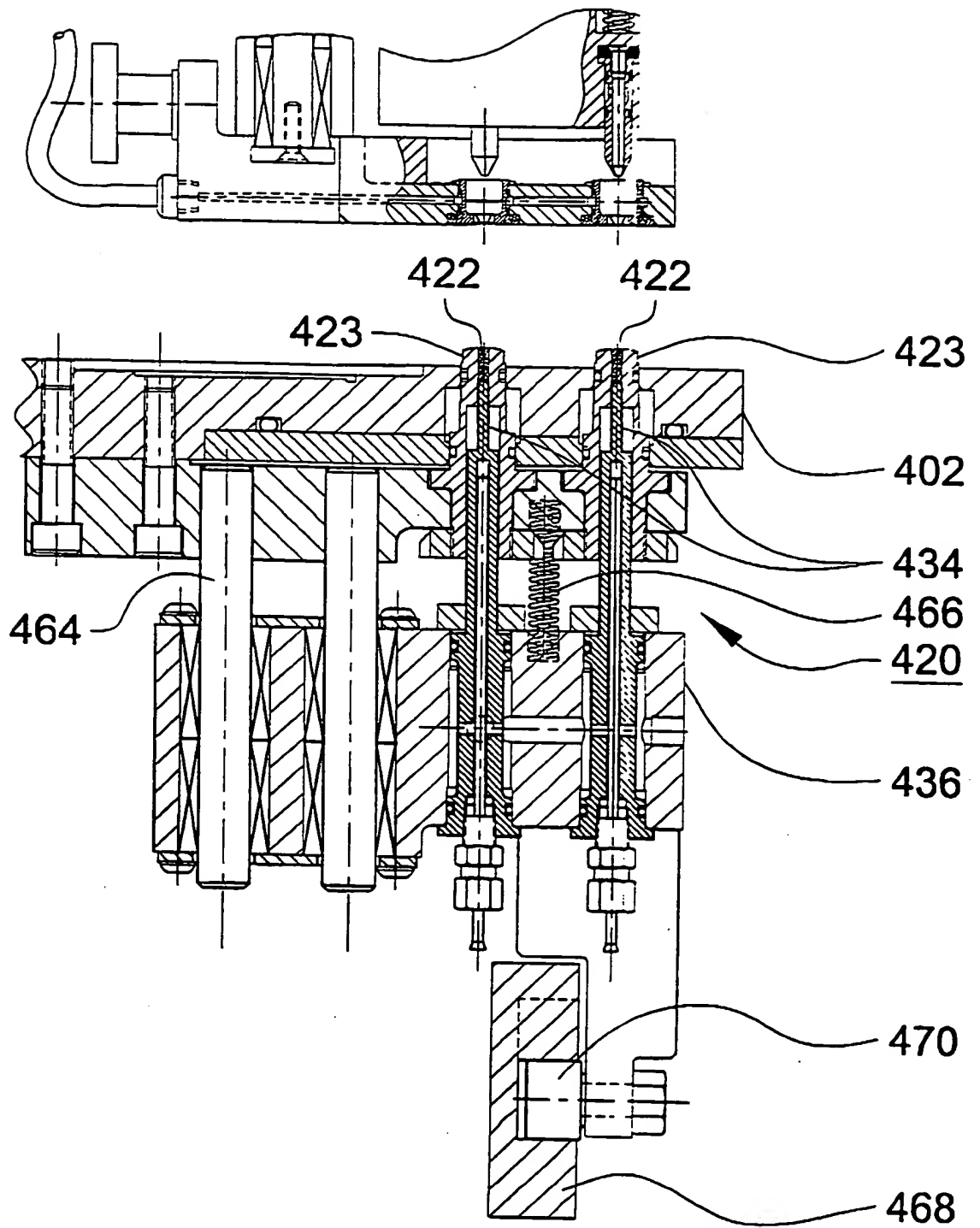


FIG. 86

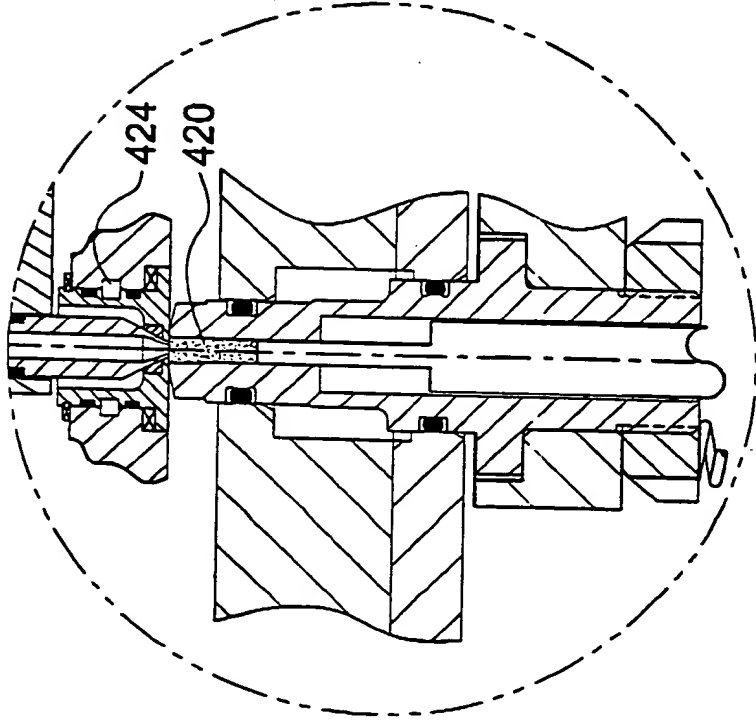


FIG. 87

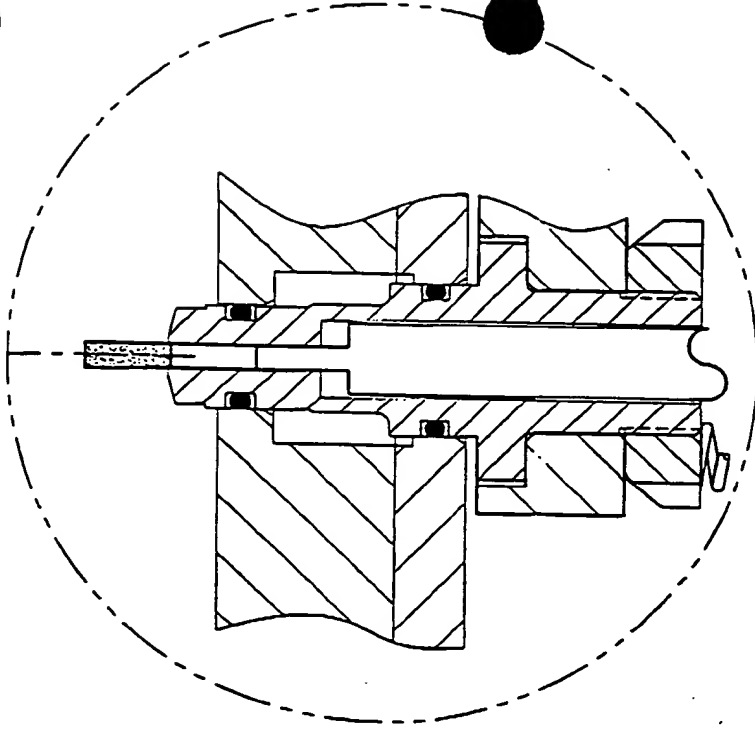


FIG. 88

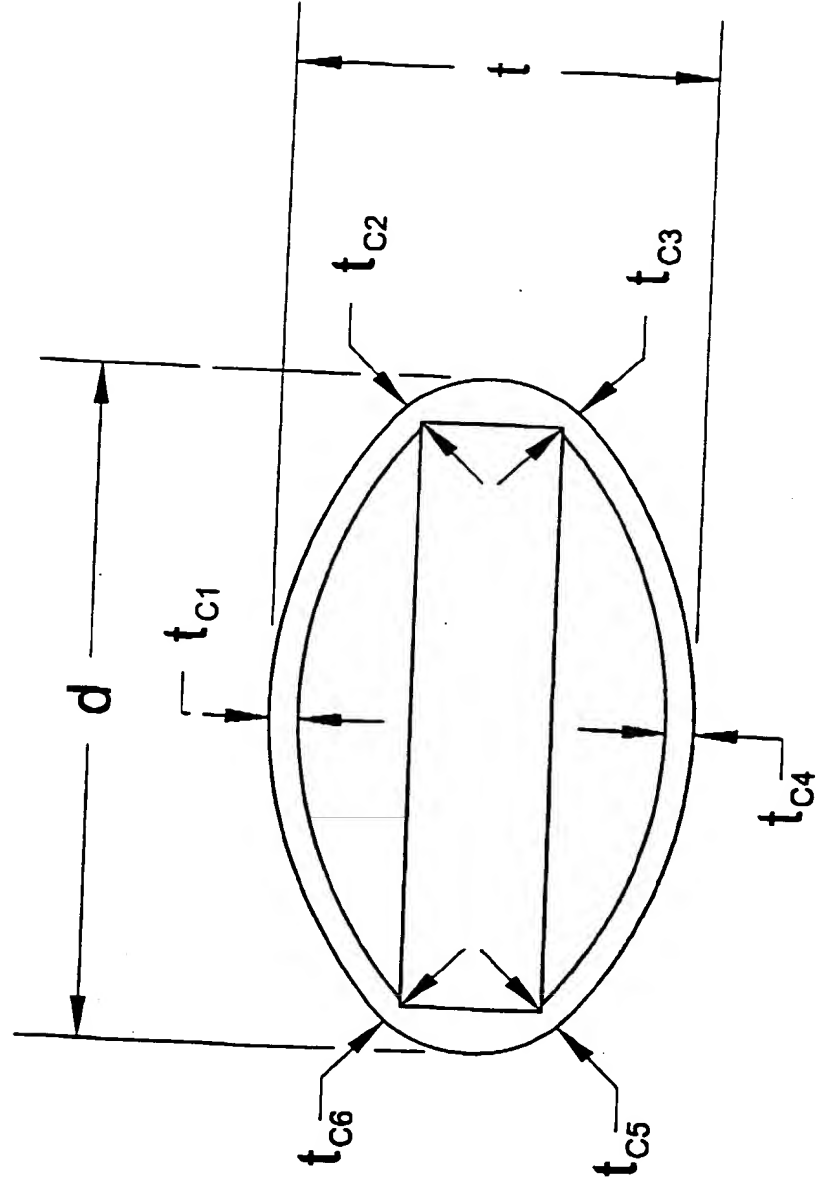


FIG. 89